History and Structure of Languages

THE JAPANESE LANGUAGE

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For Ets and Eek

Preface

Inevitably any general work of this kind ends up treating some subjects more than once in different sections; for this reason it may be useful to the reader to expand the somewhat laconic chapter headings in order to give him some idea of how the book is organized.

The first chapter gives the historical and geographical setting for the language and the culture which employs it. I have tried to restrict this account to the barest essentials and to devote what space was available to historical and cultural items that seemed to have particularly marked linguistic associations. No reader, I hope, will be careless enough to use this chapter as either a political or a literary history. Brief notices of some of the more important literary monuments in the language have been included here, but only those likely to be cited as sources for characteristic or unusual linguistic forms. Chapter 2 attempts to survey the vexatious problem of the genetic relationship of Japanese, particularly with the Altaic languages; chapter 3 reviews the history of writing systems in Japan; and chapter 4 considers the Japanese dialects, including those of the Old Japanese period. The historical phonology of Japanese is the main subject of chapter 5, which also has a brief account of the phonology of the modern standard language. Chapter 6 studies some of the loanwords which have been a prominent part of the Japanese lexicon at all periods, and chapter 7 deals with "special and notable" utterances, including some with literary aspects. Chapter 8 is a survey of grammar and syntax.

It will be seen from this that the book and the attempt which it makes to provide a general, introductory account of the main features of the history and structure of Japanese in a Western language, are an extremely rash undertaking. This undertaking would have been even rasher had it not been for the tremendous help afforded by the large body of published literature on many aspects of the subject which has accumulated over the past two decades, both in Japan and in the West. The reader who is familiar with this literature will at once recognize my tremendous indebtedness to the late Bernard Bloch and his work, to whom and to which not only I but most other non-Japanese owe virtually all of whatever insight into the structure of the language we may have succeeded in reaching. His untimely death on November 27, 1965 robbed us of our *sensei* at a time when we and our work needed him most. Second only to Professor Bloch's work in usefulness has been that of his many remarkable students, notably Samuel E. Martin, Eleanor H. Jorden, Elizabeth F. Gardner, and Masako Yokoyama.

I am particularly grateful to my colleague Professor Martin who in mid-August, 1965 first let me read and then made available to me a copy of the pre-publication manuscript of his long-awaited "Lexical Evidence Relating Korean to Japanese"; this made it possible for me to incorporate his latest findings on this problem into my own manuscript and allowed me to rewrite several sections where until then I had had to be content with repeating the statements of the earlier and now outmoded Japanese literature on the subject.

In Japan I have been particularly aided by the work of Ōno Susumu, Doi Tadao, Hattori Shirō, and Murayama Shichirō. In my own admittedly private view these men and their work tower above the great numbers of other scholars working in the field (and above the masses of their published works); but I must be the first to acknowledge that in addition to their work I have benefited in a hundred ways from the guidance and assistance of many, many other scholars in this field in modern Japan. The timely appearance in 1959 of Bruno Lewin's *Abriss der Japanischen Grammatik* made it possible for me to approach the task of putting this present volume together with a much lighter heart and with considerably easier conscience. His meticulous compendium of traditional Japanese school-grammar now provides even the reader of Western languages with an extraordinarily complete introduction to this parochial science, sparing me the necessity of treating it in any great detail here. It has also freed my hand to devote what space was available, apart from the necessary general statements, to certain newer approaches to the subject which are neither a part of Lewin's *Abriss* nor very adequately represented in the modern Japanese literature.

The same considerations of space have led to making the treatment of grammar and syntax in chapter 8 extremely brief; these aspects of the language have already received full treatment elsewhere in the series of important English-language monographs growing out of the work of several of Professor Bloch's students at Yale, so even the reader who is not able to use Japanese books freely will be put to no great trouble if he wishes, as he probably will, to supplement the skeleton presentation of these subjects in chapter 8.

Given the vastness of the Japanese bibliography on the subject, as well as its remarkably uneven quality, it seemed hopeless to attempt complete documentation here; hence the notes which follow the text concentrate on two different areas of the literature—the important Western-language works, when such exist and if they are considered important, plus a few essential Japanese works which will at least provide the reader with something of a guide to the vast and trackless reaches of this literature. The complete word indices which follow the notes make it possible to locate other treatments of individual words in different parts of the book, and the reader should consult them frequently as he goes along.

The Japanese scholar, or any reader who is familiar with the greater corpus of the *kokugogaku* literature, will most probably miss here the frequent references to the Japanese language as a peculiar or distinctive vehicle for the "expression" of characteristic "Japanese modes of thought" which are so important a part of the work of many scholars in this field in Japan. I do not for a moment deny the existence of extremely specialized varieties of linguistic behavior in Japanese, but after two decades of sporadic attempts to isolate or in some other fashion manipulate these entities for study I must admit pretty general defeat. Neither do I deny the existence of those "peculiarly Japanese modes of thought" which seem to be so real to many of my Japanese friends and colleagues; but I do maintain that unfortunately we still lack any satisfactory techniques for isolating and dealing with them, even if they do exist, and so for the time being at least a cautious agnostic silence on the entire subject is the only possible course. This probably only means that I, like most foreigners, am rather deaf to what the Japanese like to call the more *derikēto na nyuansu* "delicate nuances" (from English and French, resp.—but the copula alternate *na* is Japanese!) of the language; and if this is so, it will probably have to remain that way. To me Japanese seems to be a language much like any other—a wonderfully and incredibly complex system of human behavior, fully as complex and fully as incredible as the patterns of any other aspect of the society—but in this and indeed by this very token not, I am afraid, a whit different from any other variety of human speech. I do not expect that my Japanese friends will ever be able to forgive me for this heresy, but perhaps this book will at least help them understand some of the reasons for my views.

Transcriptions and Symbols

Modern Japanese is transcribed throughout this book according to the Hepburn system of romanization, but with the syllabic nasal always written *-n* (*-n'* before vowels and *y*), and not marking its regular change of pronunciation as [m] before labials and as [ŋ] before velars. The long vowels are marked with the macron (*ā, ū, ē, ō*) except that long *i* is written *ii*, and the symbol ' has been used to distinguish between this long *ii* and a sequence *i'i* in two successive syllables; cf. Miller, 1962, 17, fn (see the Bibliography). But the macron has always been omitted in the three place names Tōkyō, Kyōto, and Ōsaka.

The hyphen is used to indicate morphological layers in inflected words but only when necessary for clarity in the discussion (*masar-u, ao-i, s-uru*), and all such forms have been put together in the indices with their unhyphenated writings (*masaru, aoi, suru*). Japanese personal names have been written in the usual Japanese order, family or surname first, followed by given name(s), title(s), or style(s). In the case of persons living before about 1200 it is customary in speaking (but not in writing) Japanese to insert the grammatical particle *no* < Old Japanese *nö* between the two main portions of a Japanese name, thus Ō no Yasumaro, Fujiwara no Shunzei, Fun'ya no Chinu, but this *no* has been omitted in writing such early names in this book. The reader who finds this as strange as saying "Joan Arc" or "Eleanor Aquitaine," which in a sense it is, may consider himself at liberty to reinsert this *no* as often as he feels it to be necessary.

Special symbols for transcribing earlier features of the language are explained in the text when they are used; note especially the symbols for the nasalized vowels *ã, ĩ, ũ*, etc. Japanese dialect studies, when they use phonetic symbols at all, generally aim at the usage of the International Phonetic Association; in such records, [ï] is a centralized *i* and [ẹ] a narrow *e;* see also Kindaichi in Ichikawa and Hattori, 1955. Affricates have been written with superscript letters for the second element (t^{s}, $d^{\check{z}}$), and *š* and *ž* are used throughout for the [ʃ] and [ʒ] of much of the literature. Old Japanese *F* is often written *φ* or Φ in Japanese publications. Most transcriptions of Japanese in this book ignore the suprasegmental features of pitch contrast which are an important part of the modern language, and perhaps of all stages in its history; these contrasts have been noted when pertinent to the discussion but otherwise omitted, since to enter them consistently on every form cited would have involved extrapolating them onto many historical forms not surviving in the modern language, a procedure of questionable linguistic value.

Korean and Middle Korean forms are transcribed according to the system explained in detail in Martin, 1966. Modern Chinese is cited in the modification of the Wade-Giles transcription commonly used in sinological works; for the symbols used in writing Middle Chinese reconstructions see Karlgren, 1957. The Shuri language of Okinawa is transcribed according to Hattori, but replacing his [ʔ] with *″*; suprasegmental features of tone and pitch contrast have not been included in any of the transcriptions of Korean, Chinese and Shuri except where particularly relevant to the discussion.

Other symbols used include * for reconstructed or hypothetical forms, or on occasion for non-occurring forms, [ ] for phonetic, / / for phonemic, and // // for morphophonemic transcriptions, but all these have been used sparingly and omitted whenever the context of a passage makes it otherwise clear which variety of transcription is intended.

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Chapter 1

Historical and Geographical Setting

Zipangu is an island in the eastern ocean, situated at the distance of about fifteen hundred miles from the mainland. . . . It is of considerable size; its inhabitants have fair complexions, are well made, and are civilized in their manners. Their religion is the worship of idols. They are independent of every foreign power, and governed only by their own kings. They have gold in the greatest abundance, its sources being inexhaustible; but as the king does not allow of its being exported, few merchants visit the country, nor is it frequented by much shipping from other parts.

> To this circumstance we are to attribute the extraordinary richness of the sovereign's palace, according to what we are told by those who have access to the place. The entire roof is covered with a plating of gold, in the same manner as we cover houses, or, more properly, churches, with lead. The ceilings of the halls are of the same precious metal; many of the apartments have small tables of pure gold, considerably thick; and the windows, also, have golden ornaments. So vast, indeed, are the riches of the palace, that it is impossible to convey an idea of them.
>
> In this island there are pearls, also, in large quantities, of a pink color, round in shape, and of great size, equal in value to white pearls, or even exceeding them. It is customary with one part of the inhabitants to bury their dead, and with another part to burn them. The former have a practice of putting one of these pearls into the mouth of the corpse. There are also found there a number of precious stones.

With this tempting description the Venetian Marco Polo (1254?–1324?), writing in prison in Genoa around the year 1298, introduced to the European world those islands whose name in various versions of his narrative is written Zipangu, Zipangri, Cyampagu, Cimpagu, and in still other ways and which today we call Japan. His account of the natural wealth of the islands was totally misleading. Japan was never particularly rich in deposits of gold. As early as A.D. 749 the discovery of enough native gold to decorate the colossal Buddha image in the Tōdaiji, a great temple in Nara, was the occasion for official national rejoicing, and little has changed in this respect since the mid-eighth century.

How the canny Venetian, who should surely have learned in the course of his Far Eastern adventures and his long stay in Mongol China to be a little more cautious about tall tales of wealth in inaccessible islands, could have been duped in this way and why his Chinese informants misled him are questions which probably can never be answered; or perhaps even the Chinese of his day thought that Japan was the untapped treasure trove of gold and jewels which they described to Marco Polo.

At any rate, his description was tempting enough to arouse any European adventurer. Christopher Columbus was looking for the gold and pearls of Zipangu as much as for anything else when he set out on his voyage of discovery which led him into the New World, and he was by no means the only European explorer to be spurred on by the Venetian's colorful account of the gold roofs, gold tables, and gold ceilings to be found in Zipangu.

Even the first Portuguese visit to Japan in 1542 did little to disenchant the European public, at least not those who read of this "discovery" of Japan in that version of the voyage which reached Europe through Antonio Galvano's second-hand account published in 1557:

> In the year of our Lord 1542, one Diego de Freitas being in the realm of Siam, and in the city of Dodra, as captain of a ship, there fled from him three Portuguese in a junco (which is a kind of ship) towards China. . . . Standing in 30° odd latitude, there fell upon their stern such a storm, that it set them off the land; and in a few days they saw an island towards the east, standing in 32°, which they do name Japan, which seemeth to be the isle of Zipangry whereof Paulus Venetus [Marco Polo] maketh mention, and of the riches thereof. And this island of Japan hath gold, silver, and other riches.

The geographic setting of Marco Polo's Zipangu, and our Japan, even minus its legendary wealth in gold and pearls, is impressive and significant in its own right. Off the Pacific coast of the Asiatic mainland and strung out along its periphery there lies a series of mountainous volcanic islands which arrange themselves into three great archipelagoes, all curving gently inward toward the mainland. To the north are the Kuriles, to the south the Ryūkyūs; and between these two extremities, lying roughly between latitude 31° and latitude 45° north, there is the central and most important of the three archipelagoes—Japan. Essentially it consists of four islands—in order from north to south, the islands of Hokkaidō, Honshū, Shikoku, and Kyūshū—and hundreds of other tiny bits of land, most of them uninhabitable. Here some 94,000,000 or more people find a place for themselves and manage to wrest a living from a total of not quite 150,000 square miles of land. This is roughly the same total area as that of California, but less than 16 per cent of it is suitable for agriculture, even for the intensive variety at which the Japanese excel. Some 75 per cent of all the Japanese land space consists of rugged hills and mountainous areas which defy cultivation by any means at all, even though the Japanese are past masters at making every square inch produce its just share of food; yet 40 per cent of the total population still resides in rural areas and is directly connected with agriculture.

The climate has surprising extremes in store for the person rash enough to attempt to predict it solely on the basis of the latitudes on the globe between which the Japanese islands are found. In essence, the Japanese climate is subtropical, but it still displays a wide variety of conditions ranging all the way from those closely resembling South Dakota's spring-wheat areas on the one hand to Louisiana's sugar-cane regions on the other. The Tokyo and Kyoto areas can—and often do—run Calcutta a close race for discomfort and unpleasantness in the summer; while the bitter cold of winter in these same places is an immediate indication of how the islands' proximity to the Asiatic mainland makes for an essentially continental rather than an insular climate for at least half the year. The Japanese profess to be able to distinguish and even to enjoy four distinct seasons in their year, and much has been and continues to be written about the influence of these seasons upon the Japanese national character and culture. Most visitors, however, even after many years in the country, tend to be more impressed by the extremes both of summer and of winter, and by the difficulty of identifying the Japanese spring and autumn except as fleeting moments of welcome respite between the two dominant extremes of the climatic scale.

Unpleasant and trying though it may be for human beings, the climate in the greater part of the Japanese islands is ideally suited to the intensive agriculture necessary to support the large population. Japan is generally fortunate both in the amount and in the frequency of its rainfall. The rural population, by combining modern agricultural technology with its own unrelenting toil, each year manages to wring amazing quantities of food out of the tiny amount of arable land in the islands.

But in other respects nature here is often far less beneficent both to man and to his food supply. Japan is a prime target for the autumn and early winter typhoons of the Far East, which frequently lash the islands with rains and winds of incredible force. Winter brings mountainous drifts of snow to many parts of the country, and dry, harassing winds of bitter cold to others. For once the normally high humidity is considerably reduced in some parts of the country, but only with a commensurate increase in the danger from fire. Moreover, the islands themselves are geologically unstable and constantly at the mercy of seismic and volcanic activity, often of frightening and on occasion even of devastating intensity.

Like the Japanese climate, Japanese geology is a study in extremes.

Mount Fuji soars 12,461 feet above sea level, and there are several peaks in the so-called Japan Alps, in central Honshū, which exceed 10,000 feet; while just off the Pacific coast are some of the deepest known spots in the sea. Thus within a short lateral distance there are total ranges in elevation of from seven to eight miles, from the top of Japan's snow-covered mountains to the depths of the Pacific. It is not difficult to understand why the very geological foundations of the islands are constantly at the mercy of the incredible stresses and strains which this topographical unbalance sets up.

Population is a third extreme which, particularly in recent years, has been added to all the others. It is estimated that during the century and a half before 1868 the population of Japan remained fairly constant between twenty-eight and thirty million persons. By the time of the first census by modern methods in 1900, the population had already reached fifty-six million; by 1963, in spite of the destruction and chaotic aftermath of World War II, it had soared to ninety-four million. In recent years the birth rate has shown a significant drop but the severe population pressure of modern Japan will remain a problem for generations to come. The Japanese are unwelcome immigrants almost everywhere in the world, except for certain desolate reaches of South America where even traditional Japanese bravery and fortitude are sorely put to the test. With no place else to go, the people of modern Japan must continue to fight their daily battle for survival with an ingenious combination of intensive agriculture, large-scale imports of foodstuffs, and a life-and-death struggle for export markets for the products of their own heavy and light industry.

To what often seems to be their appallingly unequal struggle with land and climate the Japanese people bring a determination and steadfastness which an observer from the outside cannot help admiring, even though the concrete expressions of these qualities often involve extremes which he may well be forgiven for neither approving nor attempting to imitate. The violence of Japanese nature is reflected in elements of violence which are never far below the surface in Japanese society, though centuries of Buddhist culture have helped conceal these deep-seated veins of fire with a brittle lava of elaborately structured manners and formalized behavior. Indeed, much that is most rewarding in the traditional Japanese reaction to the harsh stimulus of the natural setting is to be ascribed to hundreds of years of quiet, insistent preaching of the gentle other-worldly doctrines of Mahāyāna Buddhism. Just as the Buddhist precept of not taking animal life was simply not possible for a nation one of whose major sources of food has always been the sea, and just as Buddhist clerical celibacy soon fell before the demands of the Japanese family system, so also did the Mahāyāna doctrines of non-violence and other-worldliness generally find it necessary to take second place to the strict demands and values of traditional Japanese society. In the process Buddhism nevertheless contributed a tremendous amount to the Japanese "national character"—if one may be permitted to indulge in this vague abstraction—and much of what the visitor today finds rewarding and satisfying in modern Japanese life is the direct result of the centuries of Buddhist preaching and faith.

The visitor is almost always most impressed with the contrast between old ways and new ways of life which modern Japan displays. The Japanese like to think of themselves, their country, and their culture as a harmonious blending of the East and the West, of the old and the new, and of the best of each of these. There is some warrant for this view, but a more penetrating one recognizes that instead of a harmonious merging of contrasts modern Japan more often presents an unstable amalgam of conflicts and inconsistencies. The society has hoped for a happy synthesis, but more commonly it has had to settle for an uneasy schizophrenia. Most people in modern Japan still live in unheated, almost unfurnished dwelling units in which the most inconvenient features of traditional Japanese architecture have been added to the least pleasing elements of Occidental building tastes of a half century ago; but more and more of them work in elegant offices and other modern buildings that are in the first rank of modern construction and design. The Japanese housewife still struggles against almost unbelievable odds to prepare even a simple meal in her medieval and almost totally unequipped kitchen; but after dinner she is likely to watch a Japanese-made television set that is a marvel of technological achievement. Employer-employee and teacher-student relationships are still largely governed by a complicated set of rules and interrelated responsibilities originating in Japan's feudal past—a behavior pattern which appears to have adapted itself to survival in the twentieth century with amazing persistence.

Above all, however we choose to describe modern Japan—a happy blend of East and West, or an uneasy struggle for the containment of contradictions—the elements that go to make it up are always, and significantly, those of extremes. The Japanese climate is extreme; nature in Japan is extreme; the eagerness and the technical skill with which the Japanese have borrowed the material culture of the West are extreme; the press of the Japanese population, the need for food production, the drive for exports, the productive ability of Japanese industry, the hard work, the endurance, the industry, the ambition and nervous energy of the modern Japanese—whether up to his knees in the wet spring mud of the rice paddies, in the university classroom, or in the electronics designing room—are all studies in extremes.

Who are all these people, and where did they come from? The islands themselves are thought to have taken their present shape around the end of the Pleistocene era, about twenty thousand years ago, after the end of the last great glacial phase. Evidence for early hominoids in Japan is not lacking but is both conflicting and extremely fragmentary. However, it is clear that when the ice had receded and the climate had become warm enough to support some form of human life, Japan began to be inhabited by people who built shell mounds (vast accumulations of kitchen refuse which were often probably of religious significance), and produced a great variety of low-temperature fired pottery, often decorated with designs of considerable artistic interest. The characteristic decoration on this pottery was produced by cord impressions and other markings in the surface of the wet clay before firing. For this reason modern students have termed this earliest Japanese culture the Jōmon ("cord impression") period.

The approximate dates for the Jōmon culture, on Honshū at least, range from an early form (between approximately 4500 and 3700 B.C.) through three intermediate stages and conclude with the latest phase of the Jōmon culture from approximately 1000 B.C. through 250 B.C.

Jōmon man, as far as he has been identified and studied through his own remains and the artifacts of his culture, seems to have differed considerably from the modern Japanese. He had a larger head, both in length and breadth; his face was broader and lower; he had a more massive lower jaw; and his dental occlusion was of the forceps pattern in contrast to the scissor-like occlusion thought by physical anthropologists to characterize the modern Japanese as a race. Today Japanese scholarship tends to identify Jōmon man with neither the modern Japanese nor the modern Ainu of the north, though both identifications have been made in the past. The Ainu are generally considered a "Caucasoid" people and are now restricted to the northernmost island of Hokkaidō. Their culture and language are clearly not of the Japanese pattern. They might well be called the Basques of the Far East, since no attempt to discover a genetic relationship of their language with any other linguistic stock either in East Asia or farther afield has to date been successful. Instead, modern scholarship holds in general that Jōmon man was largely destroyed, driven away, or displaced by the next cultural group to appear on the scene, the people of the Yayoi culture and of bronze- and iron-age Japan.

From the early part of the third century B.C. until about the third century of our era the Yayoi people practiced a culture and a way of life strikingly different from those of the earlier Jōmon people and full of indications suggestive of close association with the Asiatic mainland. The Yayoi people engaged in wet-rice agriculture, in contrast to the simple hunting and gathering economy of the Jōmon. Their pottery was fired at higher temperatures in closed kilns of continental influence if not of actual continental origin, and in over-all design and execution it gives still other indications of mainland influences. Above all, their use of metal and metal weapons stamps the Yayoi people as continental. This was the culture that propelled early Japan at breakneck speed into the intricacies of bronze- and iron-age technology during the approximately six hundred years between the beginning of the Yayoi period and the direct, historically recorded introduction of continental Buddhism and Chinese governmental techniques into Japan.

There seems little doubt that the Yayoi people were of a different racial stock from the Jōmon population, though the way in which some of the remains of the material culture change from Jōmon to Yayoi in certain of the sites tends to blur the picture. Cranium and facial breadth measurements of Yayoi skeletons reveal no striking differences from Jōmon specimens; but the Yayoi are greater in facial height than either the Jōmon or even the average for the modern Japanese. Some 30 per cent of the Yayoi skulls have the modern Japanese scissor-type occlusion, whereas the average Yayoi stature estimated from femur length was considerably greater than either the Jōmon or the modern Japanese.

Japanese scholarship has engaged in a tremendous amount of speculation and controversy over the connections between the Jōmon and the Yayoi peoples and modern Japanese as well as the relations of all these to the Ainu. It can perhaps best be summed up by saying that physical anthropology and archaeology give little clear indication that the Jōmon people were the original ancestors of the modern Japanese. Although the evidence for the Yayoi people is far from clear, it at least does not contradict the protohistoric cultural indications that they are more closely related to, and may in fact have been the direct ancestors of, the modern Japanese. The Ainu seem to have no close association with either of these groups.

Whatever the secrets of their Yayoi or even Jōmon affiliation, who in simplest terms are the Japanese and where did they come from? The answer is one that is capable of infinite variation and indefinite speculation. Clearly they came from somewhere (if not from the "high plain of heaven" [*takamagahara,* Old Japanese *takaama ga Fara*] of Japanese mythology). The places from which they might have come are limited by physical geography to the eastern and southeastern fringes of the Asiatic mainland and its immediately adjacent islands and to the southerly Malayo-Polynesian region. The proto-, pre-, and early historic Japanese group which called itself the Yamato race no doubt already represented a great diversity of racial strains drawn principally from these two sources. The continental elements arrived by way of those parts of Kyūshū which are most closely adjacent to the Asiatic land mass and through such way stations as the island of Tsushima, basically the same route which later served as the course for the introduction of Buddhist and Confucian Chinese culture to Japan. The proto-Malayo-Polynesian elements arrived along a more complex but equally important avenue of access to early Japan, by way of a southern island-hopping route terminating in Japan proper by way of the Ryūkyūs. Linguistically, as we shall see below, the evidence seems to indicate that the continental strains were predominant, and there is little if any indisputable evidence on the linguistic level for a Malayo-Polynesian element in the Japanese nation. Such indications are clearly there on the level of physical and cultural anthropology, however, and the whole problem is one in which further and more sophisticated studies are badly needed before any significant conclusions can be reached.

The Yamato people, consisting basically of this mixture of successive continental migrations with infusions from the south, devoted much of their time and energy to displacing the indigenous population which they found already occupying many of the choicer sites which they now set about to make their own. Once again the identification of this indigenous pre-Yamato population with either Jōmon or Yayoi or with elements of both is a complicated and at best poorly understood problem, but it seems safe to identify the survivors of the non-Yamato aborigines, who were forced to flee farther and farther north, with the modern Ainu. Certainly not all the Ainu were killed or driven north, and there can be little doubt that they too contributed something to the ethnic composition of both the Yamato people and their modern Japanese descendants. Linguistically Ainu is as isolated from Japanese as it is from other languages, and its contribution to Japanese has not exceeded a few loanwords.

From about the beginning of the Christian era, the Japanese ethnic stock was further complicated by the arrival of large numbers of Korean and Chinese immigrants. Their influence was especially great on the upper levels of Japanese life, but clearly it was not restricted to that segment of society. Many of them were skilled artisans, weavers, potters, painters, scribes, and farmers familiar with silkworm culture and other continental agricultural arts in which the Japanese were eager to be tutored. That large numbers of Koreans and Chinese found homes for themselves in Japan at this time is well documented; and even if a good number of the upper-class Japanese families who later claimed continental origins for themselves were simply trying a little discreet social climbing without much historical basis, as some certainly did, the total impression gained from the data is that proto- and early historic Japan underwent what would surely have been called an invasion by Koreans and Chinese if it had been carried out under military auspices. This wave was, however, the last significant admixture of new blood into the Japanese racial stock, and from about the ninth century on there were almost no new additions to the ethnic strain.

What happened in the ethnic formation of the Japanese people has been well summed up by a scholar of human geography:

> The Japanese Archipelago, fringing the shores of eastern Asia, with its face toward an immense continent peopled by diverse elements and its back toward a great ocean, might be described as a dead-end street into which immigrants moved as they were impelled by fear, hunger, or sheer love of adventure; and where, because they could go no further east, they were forced to amalgamate or perish.

Thousands no doubt did perish, but as many also survived to amalgamate. The ninety-four million persons who today crowd the four small islands of Japan are the ethnic fruit of this amalgamation.

The earliest date in Japanese history from a non-Japanese source is generally held to be one which corresponds to A.D. 57, when envoys came from the court of Han China to a kingdom, known to the Chinese as the kingdom of the Wo, located somewhere in the present four home islands—just where is one of the most mooted questions in all Japanese historical scholarship, but it should probably be identified with early settlements in the Kyūshū region. Wo, Middle Chinese *uâ*, seems to be a transcription of a non-Chinese ethnic name or some other designation of a foreign people, but no convincing explanation of what its original might have been has ever been advanced.

The earliest name which the Japanese employed for themselves is Old Japanese *yamatö*, modern *yamato*, a word of almost equally obscure origin though it may have had something to do with *yama* "mountain" and Old Japanese *tö*, modern *ato* "trace, footprint"; less likely are the etymologies which attempt to connect it with Old Japanese *to* "entry, passage into." The character with which the Chinese wrote this word *wo*, which of course has nothing to do with *yamato*, is also used for a group of words meaning "long and winding," "rheumatism or paralysis in the legs," and "slow, tortuous movement; fluttering," though in these instances it is properly pronounced not *wo* but *wei*, from Middle Chinese *˙jwię;* and from a fairly early period it seems also to have been explained as meaning "dwarf" or "hunchback." Then, as now, the Japanese found this latter an unflattering reference, and in the Chinese dynastic history known as the *Hsin T'ang Shu* (*New History of the T'ang*) written by Ou-yang Hsiu (1007–1072) and others in the period 1045–1060, it is recorded that about 670 "the Japanese who had studied Chinese came to dislike the name Wo and changed it to Jih-pen [= in Japanese, Nippon]. According to the words of the [Japanese] envoy himself, this [new] name was chosen because the country was so close to where the sun rises. . . . As this envoy was not truthful [the text goes on to add, however,] doubt still remains."

As a result, from the T'ang period on, the name Wo to which the Japanese had so strongly objected no longer appears in Chinese accounts of the country, where it is uniformly replaced by the term Jih-pen, or Nippon—the latter a Chinese loanword in Japanese from Middle Chinese *ńźi̯ĕt-puən* "the root, origin of the sun." This in turn provided the ultimate source for Marco Polo's Zipangu, Zipangri, Cyampagu, Cimpagu, and the rest, where the final *-gu* element is from Chinese *kuo* "country" (Japanese *koku*), and ultimately also gave the word for Japan in all modern European languages. Modern Japanese has two pronunciations—Nihon and Nippon—for this form, which has become the only word in current use for the country; generally speaking these are in free variation in the modern language, though the form with the geminate consonants *-pp-* was somewhat preferred during the militaristic thirties for oratory and slogan shouting because of its more striking over-all acoustical effect.

Whatever the original and still unidentified **wa* of the early Chinese transcriptions may have been, it survived even after the character to which the Japanese objected because of its semantic connotations had ceased to be used. Since the middle of the T'ang it has continued to be used in both China and Japan but has been written with a different character—modern Pekinese *ho,* Middle Chinese *γuâ,* "harmonious, peaceful," a semantic range to which no one could possibly object. It is now read *wa* in Japan, where this morpheme has come to mean simply "Japan," especially as a bound form in combinations such as *waka* "Japanese poetry," *wakan* "Japanese and Chinese," or in the modern language *eiwa* "English and Japanese," *waro* "Japanese and Russian" and the like, as for example in the names of dictionaries.

Also from about the same period the graph for modern Chinese *ta,* Middle Chinese *d'âi* and *t'âi* "great" was often prefixed to this *wa* meaning "harmonious" and the resulting combination read *yamato,* as a kind of rebus orthography of which we shall see more below. The story came full cycle when after World War II it was felt that writing these two characters and reading the result *yamato* was somehow too nationalistic, and that the needs of a new, democratic Japan would be better served by keeping the same character orthography but reading the combination with the neologistic Chinese loanword *daiwa,* which until that time had never existed in the language. The result was to add still another name to the several that the country has had throughout its history. Of course the original **wa* underlying the entire process remains as obscure as ever, locked in the mists of prehistory.

A Chinese historical text, the *Wei chih* (*Records of Wei*), which forms part of the *San-kuo chih* (*History of the Three Kingdoms*), contains in chapter 30 an account of what the Chinese of its time knew about the various settlements centering around this island kingdom of the Wo. The text itself covers the Wei dynasty, which ruled in China in the period A.D. 221–265, and it is supposed to contain information about both China and its neighbors during this period; its author was Ch'en Shou, who lived between 233 and 297. This text is the first in order of composition of a large number of Chinese accounts of the Japanese islands and their culture, and it offers a glimpse of early Japan as seen through the eyes of the official Chinese historiographers.

Unfortunately, this earliest Chinese account of Japan from the *Wei chih* proves on closer inspection to contain disappointingly few materials of linguistic interest, and even these are somewhat limited in value by certain major and still largely unsolved problems in the interpretation of the text. The main problem presented by the text concerns the correct phonetic interpretation of the transcriptions into Chinese characters of the early Japanese (or at least "non-Chinese") words which the text has preserved. There are fifteen transcriptions of such early words which it identifies as meaning "officer," "chief officer," and "lieutenant official" for the Wo kingdom and for various other petty kingdoms adjacent to it or encountered on the way from China to the kingdom of the Wo. There are also Chinese transcriptions for a large number of personal and place names and for one other word which it says is a word meaning "yes." In their study of the text, Japanese scholars have traditionally, but according to no recognizable pattern or method, attached to each of these Chinese transcriptions a set of conventional Japanese phonetic readings which attempt to make them into early Japanese words. According to this scholarly tradition, the *Wei chih* transcriptions are not read either as Chinese words or as Japanese words transcribed into *man'yōgana* (a subsequently evolved system, of which we shall see more later, by which Japanese words were rendered phonetically in Chinese characters used for their sound alone without reference to the semantic value of these characters in Chinese) but in an eclectic combination of different systems—in fact in any way that is thought necessary in order to make the resulting reading resemble something that might plausibly be identified as early Japanese.

Not only does this practice result in modern Japanese "readings" for the ancient words preserved in the *Wei chih* that are totally without either scholarly or linguistic value, but it has completely obscured the basic problem at issue here. The transcriptions of these words in the account of the Wo in the *Wei chih* can hardly have been made with foreknowledge on the part of the Chinese of the *man'yōgana* system for Japanese transcriptions evolved by the scribes of the court at Nara centuries later. Hence when a given Chinese character, as for example *chih*, Middle Chinese *tśię̯*, is used in a *Wei chih* transcription, it can hardly have been intended to have been used there in its later *man'yōgana* and somewhat arbitrary value of Old Japanese *ki* (and hence, incidentally, also to be distinguished from Old Japanese *kï*) but rather must almost surely have transcribed an affricate something like modern Japanese *chi*. (This *chi*, moreover, is a phonological combination that there is good reason to believe did not exist in Old Japanese, much less in a related language of the still earlier date to which the *Wei chih* materials must be referred.)

Chinese characters going with Chinese morphemes in final Chinese *-n* and *-ng* are used in the later *man'yōgana* system according to a general and arbitrary transcription scheme in which both were in effect ignored by the Nara scribes; but this system can hardly have been anticipated by the *Wei chih* author centuries before them. As a result, when we find words used in the *Wei chih* transcriptions ending in Chinese *-n* and *-ng* we are somewhat at a loss to know what to do with them. Traditional Japanese scholarship has simply treated them anachronistically, according to *man'yōgana* rules if and when such treatment appears to serve the purpose of the moment for an attempted "identification," but has not on other occasions hesitated to postulate final *-n*, final *-ng*, and even such modern phonological sequences as *shō* for the language of the *Wei chih* transcriptions. All this is totally anachronistic and corresponds not at all to what we know of Old Japanese from other sources.

To be sure, the problem of how to interpret the transcriptions of the *Wei chih* phonetically has still another level of complication. If the *Wei chih* transcriptions in many instances look suspiciously like *man'yōgana*—and they do—this is not solely due to chance. The Japanese were apt students of the Chinese language and of classical Chinese texts from the time when they first became acquainted with them, and there is evidence that, quite naturally, the *Wei chih* account of Japan was among the first texts they studied. In this way the early Japanese students of the Chinese language and script became well acquainted with the characters used in the *Wei chih* transcriptions of what were identified by their teachers as being Japanese names and words; they in turn clearly took the characters used in this text as one of the important points of departure for their development of the *man'yōgana* system itself. Here we begin to become involved in a complex and almost vicious circularity. The *Wei chih* transcriptions are not *man'yōgana*, and cannot be treated as such; but they did play a part in the development of the *man'yōgana* itself. But this part was played in terms of what the Nara scribes thought the *Wei chih* transcriptions were originally intended to transcribe, and their views on the phonetic values of the Chinese characters used in the *Wei chih* transcriptions were predetermined by their own identifications of these terms, which may or may not have been correct. The later Japanese scholarly tradition for reading these transcriptions as modern Japanese eclectically incorporates features from each level of this process.

In fact, it may well be in precisely this same circularity that the answers to some of the most perplexing problems in *man'yōgana* phonology are hidden. For example, why was Chinese *chih*, Middle Chinese *tśie̯*, selected to transcribe Old Japanese *ki?* The usual explanation is that since the character *chih* appears as the "phonetic" element in many other Chinese characters used for *ki*, this *chih* was associated with *ki* by the Japanese scribes according to some sort of "part for the whole" principle. Ingenious as this explanation is, it runs counter to almost everything we know about the use of the Chinese script, both in China and in Japan. Much more likely here is a process by which the Nara scribes made their association of *chih* < *tśie̯* with *ki* on the basis of identifications of *Wei chih* transcriptions that used this character for words involving *ki*. In this way *ki* became a kind of "special reading" for Chinese *chih* in Japanese words, and from this point on their own use of it in this aberrant value was the most natural thing possible. In this they were also encouraged, there can be little doubt, by the fact that the Chinese themselves often associated "special" or "unusual" readings with characters used to transcribe foreign words and names. In all this, the Chinese were the masters, and the Japanese the pupils, but they were apt and eager students of all the most devious applications of the new foreign script, which they found at once tremendously exciting and tremendously taxing.

The entire subject of the *Wei chih* transcriptions and the ultimate sources of the *man'yōgana*, not only as a principle but also the actual selection of the characters employed, is one that requires further study. With characteristic learning and acumen Ōno Susumu has pointed out, for example, that in the *Wei chih* transcription of *Finamöri* (see [4], below) the Chinese text follows exactly the "later" Japanese scribes' system for the representation of the eight vowels of Nara Japanese through the use of two different sets of *man'yōgana* symbols. This is an indication of great importance not only for the history of the *man'yōgana* but for much of early Japanese writing, showing as it does that the sources of even the most "Japanese" features of the writing system were ultimately sought, whenever possible, in Chinese.

In the circumstances there is no choice except to read the *Wei chih* transcriptions as Chinese, assume that they conformed at the time they were made to the general transcription conventions known from hundreds of other early Chinese versions of a great variety of foreign words, and treat them in terms of Karlgren's largely phonetic reconstruction of Middle Chinese (the language of the *Ch'ieh-yün*, a phonological text of A.D. 601). This reconstruction has taken into consideration all the relevant evidence for problems of this kind and provides the soundest phonetic basis for such an investigation. Since the *Wei chih* preserves several linguistic forms from the earliest recorded variety of the Japanese language, it is worth careful study in spite of all the interdependent qualifications and limitations which must be placed upon its use.

Another problem connected with the *Wei chih* is that of the geographical location of the area which it is describing. Most earlier Japanese students of the text have attempted to see in it an account of the Yamato culture area in the Kansai region of Honshū—a description of the early pre-Nara Japanese state.

The problems presented by the *Wei chih* text are further complicated by the fact that apart from the word for "yes" only the official titles have semantic glosses in the Chinese original to assist in any attempt to identify their originals in terms of our knowledge of early Japanese. But the Japanese system of official ranks and bureaucratic titles was borrowed from China in the Nara and early Heian periods, and it is unlikely that the earlier stages of either the language or the society had very complex features of this category. Hence the semantic glosses for the early titles recorded in the *Wei chih* account of the kingdom of the Wo are of relatively little help in identifying their Old Japanese cognates. The Chinese were generally skilled observers of foreign countries, and by the time of the *Wei chih* their historiography had already a considerable store of experience in recording both first-hand and other less reliable observations of nations outside the Chinese cultural orbit. Naturally, like all observers of foreign things, the Chinese were not able completely to rid themselves of their own cultural outlook. Their culturally centered viewpoint shows itself best in their constant mention of official titles and ranks in foreign countries, often, as here, in situations where it is easy to suspect that a far less sophisticated social organization was being somewhat mistakenly described in Chinese bureaucratic terms. To a Chinese observer it was as unthinkable for human beings not to have official titles and ranks as it was not to have heads and arms.

For the personal and place names in the *Wei chih* the situation is even more desperate. They carry no semantic glosses in the Chinese text, and the freewheeling identifications with places, persons, and even deities mentioned in early Japanese texts in which Japanese scholarship has engaged over the past several decades are totally without scholarly value. It would be necessary first to make a clear and positive geographic identification of the kingdom of the Wo, about which the *Wei chih* account is chiefly concerned, before it would be possible even to attempt to identify the place names which it contains—but naturally, these identifications must vary widely depending on where the kingdom of the Wo is thought to have been. When earlier Japanese scholars attempted to see in the kingdom of the Wo the Kansai-centered Yamato court of the early Japanese historical sources, they made their place name identifications accordingly. The consensus of more recent Japanese scholarship, that the *Wei chih* describes early Japanese settlements in northern Kyūshū, renders these earlier Honshū identifications of place names worthless and at the same time has opened the door for a flood of new Kyūshū identifications, on an equally slight basis and, unfortunately, of equally little value. What was once done for Honshū can now be done as easily for northern Kyūshū, but it remains of little importance.

Among the place names in the *Wei chih* there are at least two, Ssu-ma, Middle Chinese *sie̯-ma*, and Yeh-ma, Middle Chinese *i̯a-ma*, which it is tempting and indeed almost irresistible to identify with Japanese *shima* "island" and *yama* "mountain," even in the absence of semantic glosses in the Chinese text identifying their meanings.

If the identification of these two words is correct (and several others could also be made for some of the *Wei chih* place names), they would represent additions to our tiny store of early or even pre–Old Japanese lexical items. Unfortunately, the lack of semantic glosses in the *Wei chih* text at this point makes the identifications less than completely secure.

The *Wei chih* account of the Wo people is chiefly concerned with a kingdom which it calls Yeh-ma-t'ai, Middle Chinese *i̯a-ma-t'ậi*, which inevitably seems to be a transcription of some early linguistic form allied with the word Yamato. The phonology of this identification raises problems which after generations of study have yet to be settled. The final -*ậi* of the Middle Chinese form seems to be a transcription of some early form not otherwise recorded for the final -*ö* of Yamato. What seem on a superficial level to be shifts of Japanese -*ai*- to -*ō*- at a much later time in the history of the language are not uncommon, as for example in the modern non-standard Kansai dialect verb gerunds, *kaite* > *kōte* "buying," *araite* > *arōte* "washing," against the respective standard language forms *katte* and *aratte;* but, as we shall see below, the history of these forms is, rather, *aFi* > *awi* > *awu* > *au* > *ō*, and here at least no intermediate *ai* need be posited. Perhaps at the early period to which the Chinese Yeh-ma-t'ai transcription must be referred, the later Japanese final -*o* was still -*ai;* if so, Yeh-ma-t'ai would be the only record of this pre-shifted form. The problem is one with several dimensions. Many of the *man'yōgana* characters used for Japanese syllables in -*o* are to be associated with Chinese forms which we would reconstruct in Middle Chinese -*ậi*. This helps to show that the Yeh-ma-t'ai = Yamato identification is actually on a sound basis—sounder than it appears at first glance—and that it has genuine relevance for early Japanese phonology. Perhaps, as we shall see later, it also indicates something of the vowel structure of Japanese at a period somewhat prior to that of the eight-vowel Nara language with which we are most familiar from the texts.

The problem of where the Yeh-ma-t'ai of the Chinese accounts should be located has been and remains a major one for early Japanese historiography. The most plausible present consensus suggests that most of the *Wei chih* account deals with a Yeh-ma-t'ai = Yamato in northern Kyūshū, where the place name Yamato has survived until today in an orthography in Chinese characters which etymologizes it as "mountain" plus "gate." This Kyūshū Yeh-ma-t'ai was at the time the leading settlement or tribe among some thirty similar ones in the same general area. Its ruling queen during the latter part of the second century of our era extended her suzerainty over most of northern Kyūshū. Her rule was broken in a struggle with a neighboring state, ruled by a king, and members of her Kyūshū Yeh-ma-t'ai = Yamato community fled to the east to survive and to found a new settlement there. This became the Yamato of the Kansai area, to which the newcomers gave the name of their old homeland in Kyūshū; this Yamato in turn annexed the neighboring tribes and after a time established the unified state out of which early Japan grew.

The Chinese notices of Yeh-ma-t'ai are complicated by two facts. The first is that the compiler of the *Wei chih* materials was writing at a time when the Kyūshū Yeh-ma-t'ai = Yamato had already developed into a political and social entity of sufficient importance to command some notice and even respect in the Far East of the time. Naturally, he attempted to reconcile into a consistent whole the information at his disposal about the Kyūshū Yeh-ma-t'ai, concerning which he was well informed, and the relatively scanty information he had about the new Kansai Yamato, without realizing that these two bodies of materials represented two independent and mutually irreconcilable sets of data. The result of this eclectic process is the sprinkling of geographical and other inconsistencies which have plagued students of the text. The second complication is the fact, already mentioned, that the Japanese of the Nara period were themselves apt students of the *Wei chih* text, and that subsequent Chinese historiographical notices of Japan from the Sui and T'ang periods on were certainly influenced by the interpretations given to the *Wei chih* text by Nara-period Japanese students of Chinese and carried back to China by them. (We have already seen that the Chinese sources clearly state, for example, that such Japanese visitors made them alter the term for the name of the country in the Chinese annals.)

The pre- or early Old Japanese lexical items in the *Wei chih* which can be identified with any reasonable certainty are, as already indicated, few in number. The most likely ones are the following, arranged roughly in order of the degree of certainty of their identification.

(1) "When [in the Queen's land of Yeh-ma-t'ai] the lowly meet men of importance on the road, they stop and withdraw to the roadside. In conveying messages to them or addressing them, they either squat or kneel, with both hands on the ground. This is the way they show respect. When responding, they say '*yi*' [Middle Chinese ·*i*], which corresponds to 'yes.' " The customs related here in the *Wei chih* are familiar ones throughout Japanese history and, even in the absence of linguistic data, would probably stamp the society described as essentially Japanese. The word transcribed is clearly Japanese, Old Japanese *yö-* and *i-* "good, satisfactory," used in the classical language in the conclusive form *yoshi* for "right! that is so, yes." The form *i-* is an ablaut-related form going with *yö-*, a zero-vowel grade form from **yi-* > *i-*. It is surprising to find the zero-grade rather than the *o*-grade in the *Wei chih* text, but the identification is secure—possibly the only completely secure one in the entire text. Old Japanese *yö-* and

**yi*- > *i*- "good" have given *ē* in many modern dialects, including the Kansai, Sendai, and non-standard Tokyo; Middle Chinese ·*i* goes back to an earlier ·*i̯ə*-, and since the same Chinese graph which the *Wei chih* text uses here has another Middle Chinese pronunciation ·*ăi*, going with modern Chinese *yai*, perhaps some lower vowel closer to *e* should be understood here rather than *i*-.

(2) The chief official in one of the smaller communities encountered on the trip toward Yeh-ma-t'ai according to the *Wei chih* was called *to-mo*, Middle Chinese *tâ-muo*. This is almost certainly to be identified with Old Japanese *tömö*, the "corporations" of persons with the same hereditary occupation or office. These were "groups of individuals carrying out certain specialized functions of importance to the community, such as weaving, the making of tools, utensils, and weapons, military service or the performance of religious rites. Though the members of these groups had no common ancestor, their membership and their position in the group were hereditary, passing from father to son."

(3) The chief official on the island of Tsushima, the first of the communities listed in the *Wei chih* on its itinerary from China to Yeh-ma-t'ai, was called *pi-kou*, Middle Chinese *pjię̯-kə̯u*. The traditional identification of this with Old Japanese *Fiko* "honorific and laudatory designation for men" is almost certainly correct. Since the Chinese language of the period of the *Wei chih* transcriptions had not yet undergone the later phonetic changes which were to produce the bilabials and dentilabials of the T'ang period, the use of Middle Chinese *p*- in transcribing a form related to Old Japanese *Fiko* does not necessarily indicate an early Japanese pronunciation with a stop rather than with a spirant.

(4) The *Wei chih* identifies the official on Tsushima next in rank to the *pi-kou* as *pi-nu-mu-li*, Middle Chinese *pjię̯-nuo-mə̯u-ljię̯*. The same word is used for a secondary official in two other communities, where, however, the chief official is called by other still different titles which at present yield to no satisfactory explanation in terms of Old Japanese. The title *pi-nu-mu-li* is in Japan traditionally identified with Old Japanese *Finamöri*, "guarding the borders; also, persons charged with guarding the borders," from *Fina* "rural, country areas; non-civilized regions" plus *möri*-, deverbal from Old Japanese *mör-u*

"guard, defend," modern *mamoru*. Though the semantic identification is not too precise, the length of the form makes this identification in some ways one of the most satisfactory of the entire list. If it is correct, it shows a system of composition with noun plus deverbal remarkable for its identity with the same process in later forms of Japanese.

(5) The chief official in another of the communities mentioned in the *Wei chih* is called *mi-mi*, Middle Chinese *mjie̯-mjie̯*, and his lieutenant is called *mi-mi-no-li*, Middle Chinese *mjie̯-mjie̯-nâ-lji*. This is reminiscent of the curious use of Old Japanese *mimi*, apparently the same morpheme as Old Japanese (and modern) *mimi* "ear," in the titles of certain historical and mythological personages of the time of the Nara court and earlier. For example, Prince Shōtoku (574–622) is recorded in the early sources as having been called *töyö to mimi nö mikötö* as a youth, which is generally explained as meaning "his highness [who possesses] an abundance of keen ears." It is said that Prince Shōtoku's intelligence and keenness of mind were such that he could deal simultaneously with suits brought to him by a number of persons, talking to each of several individuals and answering his complaints at the same time. Probably this story is a folklore rationalization based on the above title, which has parallels elsewhere in the early Japanese onomasticon. At the very least, it is not surprising to find *mimi* in an early title and even though the identification here is not complete, it still deserves a place in the list of those *Wei chih* terms which to any extent at all can be identified as being related to Japanese.

(6) The fourth official in rank in Yeh-ma-t'ai, according to the *Wei chih*, was called *nu-chia-ti*, Middle Chinese *nuo-kai-tiei* (or, *nuo-kai-d'iei*). Japanese tradition has long associated this title with the clan name Nakatomi, a great family in early Japan who continued their role as hereditary liturgists for the pre-Buddhist religion even after their political eclipse. But it seems difficult to maintain this identification in view of the Middle Chinese forms, any more than with the modern Chinese; one difficulty is that the origins of the name Nakatomi itself are not completely clear. Some derive it from **naka torimoti* "[those who] have charge of the middle," others from **naka tu omi* "minister, chieftain of the middle." The name appears in the *Man'yōshū* as Old Japanese *nakatömi*. None of these helps much to

increase the probability of an identification, which remains unsatisfactory, with the *Wei chih* word.

(7) Most perplexing of the entire list is the name of the queen of the Yeh-ma-t'ai community, Pi-mi-hu, Middle Chinese *pjie̯-mjie̯-χuo*. This has traditionally been explained and understood in Japan as a transcription of a supposed Old Japanese form **Fimeko*, said to be an early term meaning "high born woman; princess," and to derive from Old Japanese *Fime* (also sometimes *Fimë*), a laudatory title for women going with *Fiko* for men. Later *Fime* comes to mean "princess," but this meaning is anachronistic for the earlier texts. Old Japanese *Fime* is generally thought to derive from *Fi* "sun" + *me* "woman"; it is written in Chinese characters used in their semantic value in the early texts in such a way as to indicate this derivation, in addition to the phonetic *man'yōgana* writings on which the transcriptions *Fime* or *Fimë* are based.

The difficulty concerns the supposed Old Japanese word **Fimeko*. Even though such a form has found its way into a few modern Japanese dictionaries (for example even Kindaichi's otherwise generally reliable *Jikai*), it is in fact simply one of the ghost words of Japanese lexicography; when it does appear in modern lexical sources, it is a "made-up" form listed there solely on the basis of the *Wei chih* account of early Japan. There never was an Old Japanese **Fimeko;* furthermore, the Middle Chinese spirant χ of the transcription suggests that the final element of the unknown original term did not correspond to Old Japanese *-ko*, which is rendered elsewhere—in *Fiko*, for example—with Middle Chinese *-k-* as one would expect. The final element of this transcription, then, remains obscure, though there is certainly a good chance that the first portion does correspond to a form related to Old Japanese *Fime*. Beyond that, it is at present impossible to go.

The *Hizen fudoki*, one of the early "gazetteer" texts, contains an entry which has sometimes been read as **otöFimeko*, and the **Fimeko* portion of this word has been identified with the supposed **Fimeko* of the *Wei chih*, but here it is clear that the reading itself has been influenced by the understandable inclination of the scholiasts to turn up, if humanly possible, at least one text registering the elusive **Fimeko*. This *Hizen fudoki* entry which is sometimes read **otöFimeko* is written entirely in Chinese characters, *ti-jih-chi-tzu* "younger (brother)-day-princess-child," and there is no basis for associating this particular Japanese reading with these graphs. The fact that this reading is indeed erroneous is made clear by a poem text which immediately follows only a few lines later in the same gazetteer passage, a text which since it is in poetry is written phonetically in Chinese characters used for sound, not for sense as in the earlier entry, and in which the corresponding Japanese is plainly and unambiguously written *otöFime nö ko,* which must also be the only correct reading for the earlier Chinese characters *ti-jih-chi-tzu.* Even the sense of the passage proves the same point, for the poem taken as a whole makes it clear that the meaning is *otöFime* "younger female" plus *-ko,* a suffixal element for intimate address (and hence it might also be noted, the entire compound is quite out of keeping with the personage of **Fimeko,* even if the term had ever existed.)

The *Wei chih* account begins, as already mentioned, with a brief notice of Tsushima, an island lying off Japan's China coast and a natural stepping-stone for travel to and from the mainland. In the *Wei chih* text the name of this island is written Tui-ma, Middle Chinese *tuậi-ma,* a compound written with two Chinese characters which has been maintained by the Japanese ever since they became familiar with the *Wei chih* text and which is still used for the island today. There is a good possibility that what today we write as the Middle Chinese form *tuậi* was in fact at the time of the compilation of the *Wei chih* one of a set of forms which in that period still ended in an early *-s,* soon lost, and that the *Wei chih* transcription was intended to represent something on the order of **tus-ma,* for Old Japanese *tusima,* modern Tsushima. The theory is highly speculative but not improbable; if it can be admitted, then early Old Japanese *tu* "harbor, port" and *sima* "island" can be added to the lexical items attested in the *Wei chih* text, though their semantic identification here, it must be stressed, is solely on the basis of a later folk-etymological orthographic tradition by which Tsushima is also written with Chinese characters meaning "harbor, port" + "island."

The *Wei chih* provides, in addition to these scanty linguistic data, a wealth of anthropological and ethnographic information about the early Kyūshū communities. Some of the most significant passages in the text in this connection include the following:

> Men, great and small, all tattoo their faces and decorate their bodies with designs. . . . The Wo, who are fond of diving into the water to get fish and shells, [once] decorated their bodies in order

to keep away large fish and waterfowl. Later, however, these designs became merely ornamental. Designs on the body differ in the various countries [among the Wo]; their position and size vary according to the rank of the individual. . . .

The social customs [of the Wo] are not lewd. The men wear a band of cloth around their heads, exposing the top. Their clothing is fastened around the body with little sewing. The women wear their hair in loops. Their clothing is like an unlined coverlet and is put on by slipping the head through an opening in the center. They cultivate grains, rice, hemp, and mulberry trees for sericulture. They spin and weave and produce fine linen and silk fabrics. There are no oxen, horses, tigers, leopards, sheep, or magpies. Their weapons are spears, shields, and wooden bows made with a short lower part and a long upper part; and their bamboo arrows are sometimes tipped with iron or bone. . . .

The land of the Wo is warm and mild. In winter as in summer the people live on vegetables and go about bare-footed. Their houses have rooms; father and mother, elder and younger, sleep separately. They smear their bodies with pink and scarlet, just as the Chinese use powder. They serve meat on bamboo and wooden trays, helping themselves with their fingers.

When a person dies, they prepare a single coffin, without an outer one. They cover the graves with sand to make a mound. When a death occurs, mourning is observed for more than ten days, during which period they do not eat meat. The head mourners wail and lament, while friends sing, dance, and drink liquor. When the funeral is over, all members of the family go into the water to cleanse themselves in a bath of purification.

When they go on voyages across the sea to visit China, they always select a man who does not arrange his hair, does not rid himself of fleas, lets his clothing get as dirty as it will, does not eat meat, and does not approach women. This man behaves like a mourner and is known as the fortune keeper. When the voyage turns out propitious, they all lavish on him slaves and other valuables. In case there is disease or mishap, they kill him, saying that he was not scrupulous in his duties. . . .

Whenever they undertake an enterprise and discussion arises, they bake bones and divine in order to tell whether fortune will be good or bad. First they announce the object of divination, using the same manner of speech as in tortoise shell divination

> [the method most familiar to the Chinese]; then they examine the cracks made by the fire and tell what is to come to pass.
>
> In their meetings and in their deportment, there is no distinction between father and son or between men and women. They are fond of liquor. In their worship, men of importance simply clap their hands instead of kneeling or bowing. The people live long, some to one hundred and others to eighty or ninety years. Ordinarily, men of importance have four or five wives; lesser ones, two or three. Women are not loose in morals or jealous. There is no theft, and litigation is infrequent. In case of violation of law, the light offender loses his wife and children by confiscation; as for the grave offender, the members of his household and also his kinsmen are exterminated. There are class distinctions among the people, and some men are vassals of others. Taxes are collected. There are granaries as well as markets in each province, where necessaries are exchanged under the supervision of the Wo officials. . . .
>
> The country formerly had a man as ruler. For some seventy or eighty years after that there were disturbances and warfare. Thereupon the people agreed upon a woman for their ruler. Her name was Pi-mi-hu. She occupied herself with magic and sorcery, bewitching the people. Though mature in age, she remained unmarried. She had a younger brother who assisted her in ruling the country. After she became the ruler, there were few who saw her. She had one thousand women as attendants, but only one man. He served her food and drink and acted as a medium of communication. She resided in a palace surrounded by towers and stockades, with armed guards in a state of constant vigilance. . . .
>
> When Pi-mi-hu passed away, a great mound was raised, more than a hundred paces in diameter. Over a hundred male and female attendants followed her to the grave. Then a king was placed on the throne, but the people would not obey him. Assassination and murder followed; more than one thousand were thus slain. . . .

These selections from the *Wei chih* account of Japan at once suggest an amazing number of parallels both with early Japanese life as we know it from the literary sources and, even more amazingly, with modern Japanese life. This is a tribute to the great continuity and essential unity which the culture and the society have managed to preserve in one form or another across the centuries. A detailed commentary on even the above *Wei chih* extracts would take us too far afield, but a few points which strikingly parallel modern Japanese life or resemble evidence from early Japanese sources may be singled out for particular notice.

Several different types of artifacts from protohistoric Japan show the human form and its decorations in considerable detail, and provide abundant archaeological evidence for the popularity of facial and body tattooing (*irezumi*, < *ire-* deverbal from *irer-u* "insert" + *sumi* "ink"). The practice survives today among some urban gangs of ruffians and quasi-criminals, for whom it is a pledge of unity and sometimes of secrecy. During the Tokugawa period, and even into more recent times, it was also occasionally indulged in almost as an art form in which most of the body was covered with a profusion of elaborate designs. The proficiency of the modern Japanese skin diver is well known, especially the brave women divers (*ama*) who gather shellfish and work the cultured pearl-farm beds. The band of cloth tied about the head which the *Wei chih* notes is still an indispensable article of dress for any old-fashioned manual laborer in Japan; today it is called *hachimaki*, a slang term in origin, from *hachi* "earthenware pot" (ultimately itself an Indic loanword in Japanese, from a form related to Sanskrit *pātra* or *pātrī*) + *maki*, deverbal from *mak-u* "wrap." The use of *hachi* in the slang sense of "human skull, cranium" reminds us of the rivalry in the Romance languages from the fourth century on of forms related to *caput* (French *chef*, Italian *capo*) and forms from *testa* "piece of baked earthenware, earthen pot," as represented in French *tête*, Italian *testa*.

The *Wei chih* statement that there were no horses in Japan at the time accords with the linguistic evidence; Japanese *uma* "horse" is a loanword from Chinese, and the animal is an importation from the mainland. The use of wooden (*ki*) and bamboo (*take*) dishes (*sara*, *utsuwa*) continued to be almost universal in Japan, particularly among the upper classes, until the middle of the Tokugawa period, and was one of the reasons why durable porcelaneous ceramic wares (*setomono*) were not developed and produced in Japan until much later than in China. Today wooden utensils are still required for some Shintō religious purposes; and the texture and aroma of the freshly cut wood and bamboo have become part of the aesthetic canon of the cult itself. The now universal chopstick (*hashi*) is a later importation from the continent. The taboo keepers and ritual scapegoats, Old Japanese *imibe* "guild of those who practice ceremonial abstention," are well attested from the early Japanese literary sources; it is little wonder that their unusual activities and their important role in early Japanese society attracted the attention of the Chinese. The clapping of hands during religious worship (*kashiwade*) can still be observed at any Shintō shrine in modern Japan, even after the passage of many centuries. Today the custom is explained as a noise to summon the attention of the slumbering deity being prayed to, but the *Wei chih* text shows it to be an old behavior pattern; probably it is one which vastly predates this rather charming rationalization.

The mound burial accorded Pi-mi-hu, and particularly the mention of male and female attendants (presumably slaves) who "followed her to the grave," is of extraordinary interest. No doubt the text is describing a circular burial mound or tumulus (*tsuka;* cf. *kaizuka* "shell mound") of a variety well attested in protohistoric Japan. The description of Pi-mi-hu's tumulus in the *Wei chih*, brief as it is, is now generally considered to be another reason for associating the account in this text with northern Kyūshū rather than with the Kansai area, where tumuli of a characteristic keyhole pattern traditionally described as being "square in the front and round in the back" (*zenpō kōen*) were more common.

The question of whether or not mound burials in the tumulus period and earlier were accompanied by human sacrifice, as the *Wei chih* text clearly states, is still a much mooted one in Japanese scholarship. According to one early Japanese account, the characteristic protohistoric burial figures of lightly baked unglazed clay known as Haniwa were devised to substitute for these human sacrifices, but this passage is generally thought to be a later rationalization of the Haniwa cult on the basis of Chinese literary sources, and as such is without much historical or archaeological significance.

By the time of the *Wei chih*, Japan had already been inhabited for millennia. We have seen in brief review something of what physical anthropology can tell us about early man in Japan. But neither anthropology nor archaeology, of course, tells us anything about the language of the people who produced the Jōmon pottery or about the language of the Yayoi culture. Archaeology can deal only with those elements of human culture which leave durable remains, and language before the invention of written records leaves nothing for the spade to uncover. There is no evidence that either the Jōmon or the Yayoi peoples ever made even halting steps toward developing a system of writing, and so we lack the information about their language which such records could have preserved for us. Not until the historical period and the introduction of Chinese script is there any written evidence bearing on the earliest stages of the Japanese language. Even in the absence of early written records the techniques of the comparative method could provide data about the earliest stages of a language (we shall see below something of what they can tell us about Japanese), but in the present state of such studies they hardly carry us back to within even striking distance of the Jōmon culture, even assuming that the direct Jōmon relationship to the later Japanese could be maintained. As far as the Yayoi people are concerned, if there is but little evidence to prove that they spoke some early version of Japanese, there is by the same token no reasonable grounds on which to doubt it.

The tumulus culture in protohistoric Japan was characterized by the erection of monumental burial mounds for persons of the upper classes and by the production of characteristic kinds of funerary decorations and burial objects in unglazed pottery. These took various forms: many are in the shape of urns or simple hollow tubes of lightly baked clay, while others are amazingly artistic representations of men, women, animals, and especially horses. Together they form a group of protohistoric burial and funerary objects which are today known as Haniwa, a word which itself may well have been of Altaic origin. This would not be surprising, since the entire tumulus period culture, including its burial cult, was deeply indebted to continental models.

The Haniwa were usually not buried with the corpse under the characteristic tumulus which formed the center of attention for the cult, but were set up in rows and columns on the side slopes of the burial mound as if to guard and protect it from both human and spiritual enemies. Continental influence is immediately apparent in much of the clothing represented on the human Haniwa figures as well as in the saddles and other gear on the Haniwa horses. This influence may perhaps also be traced linguistically, in such items as the curious, flat, board-like headdress on many of the female shaman figures. In several non-standard Japanese dialects today the word still current for a female shaman who serves as a medium for contacts with the spirit world, especially for communication with the spirits of departed relatives, is *itako*. The form has various dialect reflexes, including *ichiko* in the modern standard language, Aomori *edako*, Nobeji *ïdako*, and Okinawan *yuta* (cf. also standard Japanese *ito* "young, especially a young woman"). In modern Japanese an object shaped like the decoration which these female shamans wear would ordinarily be called *ita* "flat board," and hence it may well be that these figures are among the first evidence of any sort for a language related to modern Japanese. To be compared are general Altaic **iduγan* "female shaman" and its many reflexes, including Kalmuk *udaγan*, Buriat *udagang*, Khalkha *uDDăγą̆*, Ordos *u͔dag͔an*, Yakut *udaγan*, Northern Tungus *idakon*, *odakon*, *odoγan*, Written Mongol *iduγan*, *udaγan*, *uduγan*, and Dagur *iadegen*. The "breaking *i*" of the Dagur form is clearly attested for the Altaic word as early as the Chinese T'o-pa Wei dynasty of 439-535, but the Japanese forms *itako* and *ichiko*, if related, would preserve both the original "unbroken" unassimilated *i-* in the first syllable and the original Altaic sense of the term which has undergone semantic change in many of the Altaic languages.

Be this as it may (and the point is admittedly a speculative one), the tumulus culture was eclipsed suddenly and spectacularly by a great invasion of Chinese Buddhist and Confucian culture from the Asiatic continent. Especially in the importation of Buddhism, Korea served as the middleman, as it was later to do for much of Japan's dealings with the Asiatic mainland. The official date given for the introduction of Buddhism to Japan is 552 (or 538); and as early as 594 Buddhism had been proclaimed the new state religion of Japan. It took far longer, however, for the Japanese to gain any real understanding of this great new religion. The Japanese were converted to Buddhism and became devout Buddhists several decades before they had any clear idea of what the religion itself actually taught or of what Buddhism as a system of thought and beliefs really comprised. This is in no way to decry the earnestness and sincerity of the early Japanese Buddhists, but only to emphasize the vast complexity of this new religion which had suddenly found its way to them from India through China and Korea and was now in the process of spreading to the outer limits of the Far Eastern cultural area.

With Buddhism came Chinese books and Chinese letters. Buddhism had come to China as a foreign religion, but in China it had been and was still being strangely and wonderfully domesticated. Its Indic scriptures and other important writings were translated from their Buddhist Hybrid Sanskrit and from other Indo-European originals into Chinese, at first haltingly and then in a great flood of versions which combined growing doctrinal accuracy with increasingly great skill in the manipulation of literary Chinese for religious purposes. By the time Buddhism had been in China for a century or two its Indian origins had, linguistically at least, been almost totally forgotten, so that the Buddhism which came to Japan from China through Korea was a Buddhism which to all intent and purpose knew only Chinese as its sacred language.

In their zeal to learn something of their new religion the Japanese naturally now turned to an intensive study of Chinese culture and in particular of the Chinese language, a study from which they did not really disengage themselves until well into the present century. By 604 the Japanese were using the Chinese calendar, an official tribute to the extent of the permeation of Chinese culture at the time, and had drafted their own so-called seventeen-article constitution (though the current text of this document has been suspected of being a later forgery); this, written in the Chinese language, set forth the blend of Buddhist and Confucian theories of the state and of government which Japan hoped to imitate from China.

Once started on their task of mastering the Chinese language and script, the Japanese at first saw neither much reason nor any great demand to write their own language. As a result, the only evidence we have of Japanese being written in Japan in this early period is found in an occasional personal or place name transcribed phonetically into Chinese characters on swords, metal mirrors, or Buddhist religious and art objects. Out of these sporadic starts with Japanese written phonetically in Chinese characters the later *man'yōgana* would develop, but in the meantime the written language of Japanese government and of Japanese learning had become Chinese and was to remain so, at least in some areas and in some limited ways, for many centuries.

Beginning in 607 a series of Japanese missions was sent directly to the capital of China. The reports they brought back and the training which such visits gave them in Chinese language, life, and customs provided the basis for a thorough sinicization of the new Japanese state. Considering the rigors of travel at the time and the great physical dangers to which such missions were exposed, a surprisingly large number of people went back and forth. Increasingly large numbers of Japanese became proficient not only in reading and writing Chinese but also in actually speaking and understanding the language. Nor was this cultural traffic all in one direction. Chinese in small but still significant numbers came to Japan to spread Buddhism, and remained to provide instruction in the Chinese language. Hence there is little doubt that at first the study of written Chinese in Japan was accompanied by the study of Chinese as a living, spoken language and that, just as Chinese was written in early-seventh-century Japan, so also Chinese was spoken there.

This pattern, however, was soon to be broken. Early in the history of the Chinese language in Japan a set of traditions for reading classical written Chinese as if it were Japanese grew up—the reading conventions which today are called *kanbun* or *kundoku.* They were not unique in Japan. Similar traditions are known to have existed in Central Asia and in other areas which early came under Chinese cultural influence and which evidenced an early interest in reading and studying classical Chinese. But only the Japanese version of this tradition has survived almost intact into modern times. As we shall see in greater detail below, in the Japanese *kanbun* reading tradition a Chinese text is simultaneously punctuated, analyzed, and translated into classical Japanese. It operates according to a limited canon of Japanese forms and syntactic structures which are treated as existing in a one-to-one alignment with the vocabulary and structures of classical Chinese. At its worst, this system for reading Chinese as if it were Japanese became a kind of lazy schoolboy's trot to a classical text; at its best, it has preserved the analysis and interpretation of a large body of literary Chinese texts which would otherwise have been completely lost; hence, the *kanbun* tradition can often be of great value for an understanding of early Chinese literature. Often the *kanbun* reading traditions which are still current in Japan go back in a continuous oral tradition to people who visited and studied in China during the T'ang period; as such they deserve more serious attention than they have sometimes been given by non-Japanese students of Chinese literature.

Once the traditions for reading classical Chinese texts in this way had been established, these conventions themselves to some extent began to influence the Japanese language of the period. Thus Chinese provided a rich source for what are in effect loan translations from the *kanbun* reading tradition into classical Japanese.

In 710 the first permanent capital of Japan was established at Nara, in western Honshū, and the earliest specimens of Japanese literature were produced in the period between 710 and 794 while the capital was located here. All these works because of their antiquity are important for the history of the language. The *Kojiki* (*Records* *of Ancient Matters*) was completed in 712. It is ascribed to Ō Yasumaro and is a reduction into a somewhat more coherent form of a large body of early oral folk traditions concerning Japanese history and mythology. The text itself is written entirely in Chinese characters but in an extremely perplexing blending of styles and, indeed, of languages. It contains some passages in pure literary Chinese, some direct quotations of speeches, 112 poems, and a great many proper and place names in Japanese transcribed phonetically in *man'yōgana*, as well as almost every possible variety of mixed Japanese and Chinese writing and language between these two extremes. Except for the direct quotations and poems in Japanese, the intention was clearly to write in classical Chinese; but words for distinctly Japanese things are often written phonetically in the middle of otherwise Chinese sentences, and the word order of the Chinese passages themselves is often disturbed to meet the requirements of Japanese syntax. The total result is a curious variety of non-language that is intelligible today thanks only to the herculean labors of generations of scholiasts and hermeneuts. The *Nihon shoki* (*Chronicles of Japan*), also known as the *Nihongi*, was completed in 720 and is attributed to Prince Toneri and to the same Ō Yasumaro. This work, carrying the Japanese historical chronicle forward to 697, is written in a far more normal variety of classical Chinese, except of course for the frequently appearing names of persons and places and for the texts of 128 Japanese poems written phonetically in *man'yōgana*. The *Nihon shoki* counts as the first of the six official histories of Japan, all of which are in Chinese; although it chronicles roughly the same events as the *Kojiki* and is based on approximately the same sources, it is a far more sophisticated work, both as literature and linguistically, and shows a greater knowledge of the methods and canons of traditional Chinese historiography.

Of prime importance for the history of the language are twenty-one short poems, found on an inscribed stone in the Yakushiji in Nara, on the quasi-Hīnayāna theme of the footprints of the Buddha. These poems are probably to be dated about 753 and to be ascribed to Prince Fumiya (> Fun'ya) Chinu. They are in Japanese written phonetically in Chinese characters, and are especially valuable to the linguist because they are the first text of any length in this type of phonetically written Japanese which has come down to the present day intact, rather than as the result of a long process of textual transmission. This is important, since the phonetically transcribed texts of Old Japanese involved extremely complex distinctions in their orthography which tended to become blurred because of sound shifts in the language during later copyings and transmissions. In these poems, known as the *Bussokuseki no Uta* (*Poems on the Buddha's Footprint Stone*) we have a priceless Nara document which preserves its original phonetic orthography intact.

Most important of all the Nara literary productions was the *Man'yōshū*, a private collection of more than four thousand Japanese poems which was assembled some time soon after 760; most of the poems date from between 645 and 760. This collection is of prime importance to both the literary historian and the linguist. Its text is written in Chinese characters used in three principal ways: as logograms to write Japanese linguistic forms with which they were now more and more rigidly associated in a one-to-one correspondence, based on semantic equivalences between the meaning of the Chinese form associated with a given character and the meaning of a Japanese form; as phonetic transcription devices to write Japanese syllables and words phonetically, without reference to the semantic value of the Chinese character in Chinese (the *man'yōgana*, in close imitation of the way the Chinese themselves wrote non-Chinese words, as for example in the *Wei chih*); and finally as rebus symbols to write Japanese linguistic forms which were homonyms of other forms suggested by the semantic values of the characters in Chinese.

The system was far more complex than the above brief account can suggest. Other texts of the time, for example, the *Bussokuseki* poems and the Japanese portions of such texts as the *Kojiki*, were written entirely in Chinese characters used for phonetic transcription, representing the sounds of Japanese without reference either to the characters' semantic value in Chinese or to the one-to-one semantic relationship gradually being established with Japanese forms (the second of the two ways described above). It was not because of a lack of ability to evolve a simpler scheme or because of a lack of understanding of the practical advantages of such a system that the Japanese in the *Man'yōshū* turned to such a complex method of representing their language in writing. It is always a mistake to attempt to impose our modern standards of practicality and simplicity upon an earlier age or an alien culture. The *Man'yōshū* script esteemed its own complexities as virtues rather than shunning them as defects; these were as much a part of the poets' conscious attempts at literary composition as the content of the poems themselves. There is even in the *Man'yōshū* orthography a clearly discernible tendency to avoid simple Chinese characters, those consisting of only a few strokes (in other words, those characters which the largest number of people at the time might have been expected to know) in favor of more difficult characters with the same phonetic or semantic values.

With the *Man'yōshū* orthography Japanese consciously set its course away from a rational, unilateral approach to the written reproduction of language in favor of a pluralistic, polyvalent, and often ambiguous approach. The decision was one which provided a further avenue of expression for the aristocratic, artistic, and aesthetic canons of the time. In this way the *Man'yōshū* orthography has cultural and artistic importance over and above its linguistic significance. But it is important to keep in mind that Nara Japan did not employ the perplexingly complex and ambiguous orthography of the *Man'yōshū* because of the lack of a simpler model or because of an inability to devise a more rational one.

Two other written sources for Old Japanese deserve brief mention. The *Fudoki*, which have survived in somewhat fragmentary form, are texts whose compilation was begun in 713, though the earliest of them, the *Harima fudoki*, is perhaps as early as 708. These are attempts at local gazetteers which mention the natural resources and local traditions of the provinces, and specialize in what are generally forced etymological explanations for provincial place names. The second of the official histories, the *Shoku Nihongi* (*Chronicles of Japan, Continued*), dates from 794, the year in which the capital was removed to Kyoto, and is in Chinese except for certain earlier imperial edicts (*senmyō*) in Japanese which it records phonetically in Chinese characters. Though the first of these edicts was probably composed about 700 and though they are an important source for Old Japanese, their content gives abundant evidence of the early permeation of Chinese political thought and of early borrowings of Chinese literary clichés and stylistic devices.

In 751 the first collection of Chinese verse by Japanese poets, the *Kaifūsō* (*Fond Recollections of Poetry*), was produced, further testimony to the continued great interest in the study of Chinese literature on the part of the Japanese upper classes. Relations with continental Asia continued to characterize the Nara period. A Chinese monk named Chien-chen (688–763) was able to establish an ordination center at the Tōdaiji in Nara in 754. His name became Ganjin (along with other variant pronunciations) in Japan; he was blind by the time he arrived from China, where he had been the abbot of a famous temple in Yang-chou. There he had been prevailed upon by Japanese converts to make the dangerous journey to Japan, which took him many years and several false starts, in order to establish the legitimate line of Buddhist ordination in Japan. Until this time all the Japanese who considered themselves in Buddhist orders were actually little more than self-ordained, and it was not until the founding of Ganjin's ordination center at Nara that the legitimate hierarchical succession was brought from China to Japan. If he had arrived a short time earlier, Ganjin could have participated in the dedication of the great Buddha image at the Tōdaiji in 752; this event had been attended by people from all over Asia and even by at least one Buddhist ascetic from as far away as India. This reminds us that there is also linguistic evidence for a few important contacts directly between Japanese and Indian Buddhism apart from the normal Chinese-language intermediaries. On the doctrinal level, these can be detected in the content of certain Nara texts; linguistically, they appear in such words as Japanese *daruma* and *karuma,* which can best be explained in relation to their Sanskrit originals as being directly based on Indic forms (*dharma, karma*) and apparently did not come into Japanese through Chinese intermediary versions.

Nara Japan was well on its way to becoming a Buddhist theocracy. By 764 the empress (regnant) had appointed a Buddhist monk to be her "great minister"; by 765 he had been advanced to "prime minister," and the great temples of Nara were the real rulers of the country. As much to escape from their power as for any other reason, in 794, after several abortive attempts, a new capital was founded on the site of modern Kyoto, some distance from Nara. In Japanese historical linguistics the language of the period from the eighth century when the court was at Nara is termed Old Japanese (*jōko nihongo;* Altjapanisch).

The new capital was named Heian Kyō, "the capital of peace," and was modeled both physically and politically on the capital of T'ang China. The period from its establishment to the latter part of the twelfth century is named, after it, the Heian period. The great temples of Nara had been left behind, but they were replaced and even surpassed in importance and power by the new temples of Kyoto which soon filled the city and enhanced the beauty of the mountains which surround it. The monk Kūkai returned from the continent adept not only in the Chinese language but also in the doctrines and practices of esoteric Chinese Buddhism, to found a great monastic establishment on Mount Kōya, which was rivaled only by the equally impressive complex of temples and cloisters on Mount Hiei overlooking Kyoto itself, founded by Saichō after his return from China. The last official embassy to T'ang China left in 838 and returned in 847; from this time the Japanese tended to go their own way, although cultural and political contacts, many of them with important linguistic consequences, continued for centuries.

The elaborate T'ang-style Chinese bureaucracy which the Heian court set up on paper proved to be ill adapted to the small island country upon which it was now imposed; in most instances, indeed, it proved impossible to maintain or even to establish. The central government tended more and more to exist on the semantic level only. The Heian court nobles continued to award each other a variety of impressive titles while serving in name only as the governors or lord protectors of this or that distant province; but because these nobles lacked both the inclination to leave their elegant capital and the military power to enforce their decrees had they done so, the entire enterprise soon became simply an empty system of titles and honors with little direct connection to reality.

This is not of course to deny *in toto* the existence of some concrete achievements for which the Heian court must be given credit; one thinks in this connection, for example, of improved communications facilities and water conservation schemes. Although some projects of this kind were carried out, they were neither representative of the ideals and values of Heian society nor were they, by a curious kind of inverse logic, the kind of undertakings of which the bureaucracy would have been especially proud. Instead, it found its glory and satisfaction precisely in the posturing and posing, largely meaningless to us, for which Heian literature preserves such vivid evidence.

While the aristocratic families of Kyoto continued their now largely semantic sport of playing at government, new forces were growing in the country which were eventually to curb the power of the aristocracy and the imperial court itself for centuries. On the one hand, the Heian rulers faced increasing pressure by armed bands of warrior monks from the temples surrounding the city; on the other, they were confronted with the growth of effective concentrations of military power in conjunction with an emergent provincial aristocracy that soon rendered the elegant Heian court circles nearly powerless. By 1156 Kiyomori of the Taira family was in control of the civil government in the capital; three decades later he was defeated, and Yoritomo of the rival Minamoto family became the *de facto* ruler of Japan. A pattern was being set that would persist for centuries until the "restoration" of the Emperor Meiji in the middle of the nineteenth century. Confucian political and semantic proprieties were observed by keeping a powerless emperor and his court formally functioning in Kyoto, but the actual military and civil governing power remained in the hands of a military administrator. In theory and on the level of semantics, the emperor had appointed him to his post; actually, the emperor, like everyone else in the country, was totally subject to him. At times even the emperors, like the other members of the Kyoto aristocracy, found their own wealth and the privileges of their position severely restricted by these military administrators, who in turn generally made certain that no accumulation of wealth or power in the hands of the Kyoto circles could successfully challenge their rule. The term employed for such a military ruler was *shōgun* "general," in reference to the entirely nominal military commission which he held from the emperor.

In 1192 Yoritomo founded his own shogunate in the city of Kamakura, nearer to modern Tokyo than to the ancient capital in Kyoto and hence far enough from the old center of aristocratic culture to ensure both his own freedom of action and the relative isolation of the men in his armies from what were considered the corrupting influences of upper-class Kyoto life. In Japanese historical linguistics, the language of the period from the ninth century through the end of the twelfth century is termed late Old Japanese (*chūko nihongo;* frühes Mitteljapanisch); in its prose and to a lesser extent in its poetry was developed the essential system of the classical written Japanese language which has for some purposes been in constant use from that time to the present.

Written sources for late Old Japanese are plentiful and of considerable variety. The *Taketori monogatari* (*The Bamboo Cutter's Tale*), the oldest surviving Japanese romance, is an anonymous composition probably dating from the last years of the ninth century or from the first years of the tenth. It tells of the moon princess Kaguya-hime, who is discovered in a bamboo grove by an old bamboo cutter; she grows into a beautiful young woman who sets impossible quests for her eventually rejected suitors, spurns the hand of the Emperor himself, and eventually returns to whence she came. It is important both for its language and for its folkloristic materials.

The *monogatari*, "romance" or "tale," is one of the great genres in

Japanese literary terminology; the word itself is a compound, with its elements in Japanese syntactic order (object followed by verb), from *mono* "things, affairs," + *katari* deverbal from *katar-u* "tell, relate," with voiced initial *g-* in composition. It is interesting to note that this term for a characteristically Japanese literary genre preserves the original Japanese syntactic order of object followed by verb; under the influence of Chinese syntax, where the order for similar structures is just the opposite (verb followed by object, as in English), other new Japanese compounds were also formed in Chinese word order when the subject matter dealt with new habits or techniques imported from China—thus *kemari* "(ceremonial Heian court) football," from *ke-* deverbal from *ke-ru* "kick" and *mari* "ball"; *uchi'ito* "weaving" *uchi-* /uti-/ deverbal from *utsu* /ut-u/ "shoot in" + *ito* "thread"; *kumi'ito* "id.", *kumi-* deverbal from *kum-u* "put together"; *makie* "inlaid lacquer," from *maki-* deverbal from *mak-u* "scatter, spread," and *e* "picture," this last element itself an early Chinese loanword. Meanwhile the original Japanese word order was preserved in compounds referring to more traditionally Japanese customs, such as *eawase* "picture matching" and *uta'awase* "poem matching," with the causative deverbal *awase* from *aF-u* "join."

The *Kokin wakashū* (*Collection of Ancient and Modern Japanese Poetry*), completed in 905 by Ki Tsurayuki (died 946), Ki Tomonori, Ōshikōchi Mitsune (859–907), and Mibu Tadamine, was the first official collection of Japanese poetry, and was designed to bring together and preserve all the best Japanese poems written since the *Man'yōshū*. The work contains more than eleven hundred short pieces. The preface by Ki Tsurayuki is celebrated as the first masterpiece of Japanese prose, though it is full of stylistic borrowings from the classical Chinese in which, as a matter of fact, its first draft may well have been written. Ki Tsurayuki is also important for his *Tosa Nikki* (*Tosa Diary*), a travel account with a preface in which he apologizes for writing "like a woman," which is to say in the Japanese language and in the Japanese syllabary. The *nikki* "diary" (a Chinese loanword) became another genre avidly cultivated by the Japanese; many of the important diarists who have left works in late Old Japanese were women.

The *Ise monogatari*, dating from the beginning of the tenth century, is a work of unknown authorship containing many poems by Ariwara Narihira (825–880), who is often assumed to have been its author. It is a collection of 125 short narratives, each serving as the framework for one or more poems, many of which deal with the amorous adventures of Narihira. Its structure was widely copied in later works, as for example in the *Yamato monogatari*, another anonymous work, probably from about 950. The *Gosen wakashū* (*Later Collection of Japanese Poetry*) of 951, the second official poetry collection, coedited by Minamoto Shitagō (911–983), Kiyowara Motosuke (908–990), Fujiwara Yoshinobu (922–991), Ki Tokibumi, and Sakanoe Mochiki, continued the tradition of periodic collections of notable poetic compositions. The *Utsubo monogatari* is an anonymous romance of court life from about 970, variously ascribed to Minamoto Shitagō (a popular choice for many such ascriptions) or to Fujiwara Tametoki. Its theme if not its degree of accomplishment has led to its reputation as a precursor of the *Genji monogatari*. A similarly anonymous work from the second half of the tenth century, also sometimes ascribed to Minamoto Shitagō, is the *Ochikubo monogatari*, a romance dealing with the troubles a young girl undergoes at the hands of her wicked stepmother.

The most important monument of late Old Japanese, and indeed the high point of all Japanese literature, is the *Genji monogatari*, written sometime between 1001 and 1010 by a daughter of Fujiwara Tametoki, known to later generations as Murasaki Shikibu; this is not her name (which has not survived) but a fictive title fashioned from the name of a principal character in the work itself plus a court title which may have been that of her husband or her father; she probably died sometime around 1015. The *Genji monogatari*, well known to the Western world in its amazingly rewarding English translation by Arthur Waley as the *Tale of Genji*, is one of the world's great books. "[The early romances] are almost childish in comparison with [Murasaki's] sophistication. She moves without faltering through long, intricate sentences, and is the mistress not the slave of a most complex grammatical apparatus. She extracts the fullest value from a vocabulary which is in the nature of things restricted, and the Chinese words that she uses are not pedantic intruders but seem to be at home in their surroundings." The fact that this text was written by a woman points up the fact that although the language for official documents and other important uses of writing remained Chinese, novels, diaries, and other frivolous works, especially works by and designed largely for women, were generally written in Japanese. There were exceptions, as for example in the work of evangelically minded Buddhist priests who found it necessary to use Japanese to reach most of the people to whom they wished to address their appeals; but by and large the written language of both government and religion was classical Chinese.

The Heian diarists and essayists also left rich materials in late Old Japanese; Murasaki herself is responsible for one such *Nikki;* also important is the *Sarashina nikki* by a daughter of Sugawara Takasue (b. 1008), written in 1059–1060, which covers the authoress' activities in the period 1021–1058. The *Makura no sōshi* (*Pillow-book;* the sense of the title is "miscellany") of Lady Sei Shōnagon is somewhat earlier, and gives a detailed if often rather waspish picture of life at court, with its almost unbelievably detailed attention to its own elegant concerns and almost complete ignorance of the outside world.

The *Kagerō nikki* (*Gossamer Diary*) is a combined autobiography and diary covering twenty-one unhappy years in the life of a mid-Heian noblewoman known to us as "the mother of Michitsuna." Little is known of her life after 974, the terminal date of the text, but she was still active as a poet in 993 and probably died around 995. She was an aunt of the author of the *Sarashina nikki;* one of her sisters was married to a great-uncle of Murasaki Shikibu; and one of her brothers was married to a sister of Sei Shōnagon, author of the *Makura no sōshi.* Such was the closely interrelated world of Heian letters and Heian society.

The *Sagoromo monogatari*, an anonymous romance ascribed to a daughter of Murasaki and probably dating from the middle of the eleventh century or from the early part of the twelfth, is a courtly romance modeled on the *Genji monogatari.* The *Goshūi wakashū* (*Later Collection of Gleanings of Japanese Poetry*) of 1086, compiled by Fujiwara Michitoshi (1047–1099), was the fourth such collection. The *Ōkagami* (*Great Mirror*) is an anonymous historical romance ascribed to Fujiwara Tamenari, dating in part at least from the end of the eleventh century, which covers the events of the period 850–1025. The *Eiga monogatari* (*Romance of Splendor*) is another romance from approximately the same period; its account, ending with the year 1092, is arranged in chronological sequence, in contrast to the *Ōkagami* which follows the arrangement of a traditional Chinese dynastic history in its division between "annals" and "biographies." Both these romances center around the figure of Michinaga (966–1027), the most celebrated of all the heads of the great Fujiwara clan.

The *Konjaku monogatari* (*Romances Now Grown Old*) is ascribed to Minamoto Takakuni (1004–1077), who undoubtedly was responsible for some sections, but the text as received today has many later additions and comes in general from the late eleventh and early twelfth centuries. This collection of Japanese and Chinese stories and fables, including many of Buddhist and Indic origin, is important both for the history of the language and for its folkloristic content. Its language is a strangely mixed Chinese and Japanese, well described by one scholar as "Chinese written with the aid (or obscuration) of Japanese grammar," in an equally hybrid orthography of considerable complexity.

Another late Heian collection is the *Tsutsumi chūnagon monogatari*, a collection of ten short romances. It has been called the world's oldest collection of short stories, and is of importance for the student of comparative literature as well as for the Japanese specialist. The *Senzai wakashū* (*Collection of a Thousand Years of Japanese Poetry*), compiled by Fujiwara Shunzei (or Toshinari) (1114–1204) in 1187 or shortly after, was the seventh official collection of Japanese poetry. The compiler, his son Teika (or Sadaie) (1162–1241), and the itinerant Buddhist monk Saigyō (1118–1190) are credited not only with introducing new techniques but also with bringing new freshness to the art of Japanese poetry.

A brief period of about a hundred years at the end of the Heian is known as the period of "cloister government" (*insei*). During this last century of the Heian the emperors customarily "abdicated" their thrones early in their reigns and took Buddhist orders, retiring with their courts to some spacious detached palace which served as their "monastery." From here they continued to engage in political life, often to a rather more active extent than had been possible for them before this "retirement." This period, officially counted from the abdication of the Emperor Shirakawa in 1086 until the establishment of Yoritomo's shogunate in 1192, is generally put together in linguistic history with the following Kamakura period, but some scholars today argue that it should not be separated from the Heian period, and that although some *insei* documents do indeed show the first signs of typically Kamakura linguistic developments, they are nevertheless closer on the whole to the Heian. Politically the period of "cloister government" was one of the final shift of power out of the hands of the traditional aristocracy into those of the newly emergent warrior class; linguistically too it serves as a century of transition to the Middle Japanese of the following Kamakura period.

With the period of the Kamakura shogunate Japan entered what may well be called her medieval period, even though the term is somewhat too redolent of European associations to be useful in a consideration of Japanese history. The century and a half to the Ashikaga shogunate was marked by important developments in popular evangelical Buddhism in Japan, by a series of abortive attempts on the part of Mongol-occupied China to invade the islands, and by a brief period of ascendancy of the Kyoto court, even leading at one point to that rarest of all rare phenomena in Japanese political life, a few years of direct imperial rule. In the course of putting down this attempted restoration of imperial prerogatives, a rival line of anti-emperors came into being. It was several decades before the Ashikaga family, who succeeded to the shogunate in 1338, were able to reunite emperor and anti-emperor into one well-behaved but impotent puppet.

In the Kamakura period the necessity to communicate with mainland China in the negotiations before and during the attempted Mongol invasions helped expose the great decline in the ability of Japanese scholars and statesmen to handle the Chinese written language. It was necessary to delegate the writing of almost all official and semi-official documents in Chinese to the Buddhist clergy, which gave this group an unintended but much appreciated monopoly over Japan's foreign relations during this period. Most literate Japanese laymen were by this time no longer capable of composing official papers and other documents in classical Chinese or in any variety of Chinese that would be intelligible to a Chinese literatus. Instead, several specialized styles of documentary Japanese had been developed. All had as their basis the forms and structures of classical Japanese employed in the *kanbun* reading tradition; to these in the Kamakura period was added a significant leavening of the Japanese syntactical and lexical features characteristic of this time. The language of these written styles was clearly and unmistakably Japanese; but in committing it to writing, many techniques were now used in order to make the finished document look as much like Chinese as possible. Short phrases were sometimes written completely in Chinese, to be unraveled and put back into Japanese vocabulary and syntax by the reader. Occasionally, the effort produced a few lines of intelligible Chinese; more often, it did not. Even in writing solely Japanese passages every effort was made to pack the text with as many Chinese characters as possible, using them as phonetic transcriptions, as logograms, or as a great and complicated variety of rebus symbols, so that the end product would look as much like Chinese as possible but would still stop short of actually writing in a foreign language. The results of this style are in some ways unique as examples of linguistic hybridism and deserve special study as specimens of an unusual degree of cultural borrowing on the linguistic level.

The period from 1338 to the late sixteenth century saw the Ashikaga family as military administrators of the country, ruling not from Kamakura but from within Kyoto itself, in a quarter of the city called Muromachi, from which this period of Ashikaga rule often takes its name. It was not a distinguished period for politics or government. The country was at the mercy of local warlords and marauding bandits disguised as warriors, while in the capital the Ashikaga administrators patronized the polite arts. It was the period of the Nō drama, of the tea ceremony, and of endemic civil war. Out of the hybrid documentary style of the Kamakura period the elegant arbiters of taste to the Ashikaga shogunate developed a language for their stylized and symbolist Nō dramas, on the one hand, while on the other the great itinerant preachers of popular Buddhism made use of colloquial Japanese for their own purposes of propaganda and education.

In 1542 the first Europeans visited Japan as Portuguese merchants landed in Kyūshū. In 1549 Don Francisco de Yasu y Xavier (1506–1552), later to be canonized by his church as Saint Francis Xavier, reached Japan, and not long thereafter the Roman Catholic mission began to grow to sizable and significant proportions. Most Japanese avidly welcomed the missionaries and the material culture of Europe that they brought with them. The language was soon enriched by borrowings of words for European objects new to Japan, and as the missionaries came to grips with the problems of translating Christian literature into Japanese the language again came into contact, as it had centuries earlier, with another major world religion.

Xavier appears to have had no great success with learning the Japanese language. In January, 1551, after weeks of frustrating disappointment in the bitter cold of war-ravaged Kyoto, he and his companion the lay brother Juan Fernandez (1525–1567) turned their backs on the unhospitable and unrepentant capital and set off down the Yodo River in an open boat chanting Psalm 114, *In exitu Israel,* and there was surely more than mere chance in Xavier's selection of a text ("when Israel went forth from Egypt, the house of Jacob from a people of strange language . . .").

But in the problem of language learning, Xavier seems to have been the exception rather than the rule. Many of the early missionaries made remarkable progress in their study of Japanese—a formidable task, to say the least, in the almost total absence of bilingual informants, dictionaries, or other tools. Xavier's companion Juan Fernandez, for example, seems to have been talented in this area, and within a few years the Jesuit mission began to produce a set of remarkable works both in and about Japanese.

There is evidence in the sources for a Japanese-Portuguese dictionary and other similar works as early as 1563, and by 1598 the missionaries at Nagasaki were able to print from European-style movable metal type impressive teaching materials for instruction in reading Chinese characters as used in Japanese and for the Japanese phonetic syllabary. In 1603 the mission press issued the *Vocabulario da lingoa de Iapam com adeclaração em Portugues*, a major lexicographical work that still is often consulted as a source for the language of the period, and immediately following this, between 1604 and 1608, the great pioneer work on Japanese grammar in a foreign language, the *Arte da lingoa de Iapam* of João Rodriguez (1558–1633), who had come to Japan in 1586. With this grammar, the study of Japanese in the early Catholic mission reached its peak; Rodriguez is sometimes said also to have participated in the editing of the *Vocabulario*, but documentary evidence for this is lacking.

The *Arte* is a work of considerable scope and sophistication which served as the model for many subsequent works on the same general pattern; one cannot look through it without marveling at the industry, acumen, and brilliance of the devoted men who were able to come to a new country with its totally unknown language and in so short a time to publish works of this quality.

Other materials printed by the busy mission presses in romanization and also in Chinese characters and the Japanese phonetic syllabary were designed to give the missionaries training in Japanese history and cultural tradition as well as in the language. One such work was the romanized retelling of the *Heike monogatari* in colloquial Japanese printed at Amakusa in 1592 under the title *Nifon no Cotoba To Historia uo narai xiran to Fossuru Fito no Tame ni Xeva Ni Yavaragvetaru Feiqe no Monogatari;* the title in modern Japanese romanization would read *Nihon no kotoba to Historia o naraishiran to hossuru hito no tame ni sewa ni yawaragetaru Heike no monogatari,* The Romance of the Heike, made easy in colloquial language for the sake of those wishing to learn the language and history of Japan. The word *Xeva* of the original is modern *sewa;* the missionary transcription with *xe* indicates the late-sixteenth-century pronunciation (which still survives in the Nagasaki area and elsewhere in south Japan) of /s/ before /e/ as [š], as also in *xi* [ši]. Many of these works were by Japanese (the *Heike* version is by a Japanese catechumen known in the sources as Fabian, who later recanted) or represented careful collaboration between the foreigners and their Japanese converts.

Works like these were of course for the missionaries only the elaborate means to an end; this end was the production of doctrinal and devotional works which would make the Catholic faith known and intelligible to the Japanese. As time went on, the missionaries gained greater familiarity with the language and greater confidence in their ability to devise valid translations for religious terms; but with the proscription of their religion the output of their presses came under the same ban. The items which are known today are only a small fraction of those actually produced, and so thorough was the Tokugawa extirpation of Christianity that most of the surviving examples of these early missionary texts were discovered not in Japan but in foreign collections. A few precious copies were eventually brought back into Japan in the nineteenth century by the returning Catholic missionaries after the Meiji government reluctantly lifted the Tokugawa ban on Christianity. These provided the modern followers of Saint Francis Xavier and his company with evidence of the earlier heights their mission had reached and also with something of a head start in their work of rebuilding linguistic contacts between Japanese civilization and Christianity.

The early Roman Catholic missionaries did relatively little Bible translation but concerned themselves mostly with non-canonical devotional works. In this period the choice of translations for religious terms by European missionaries in the Far East was one of the most sensitive issues of the day. Most of the early Portuguese and other Roman Catholic missionaries in Japan chose the safer way of leaving most technical religious terms either in Latin or in their own original European language, and it remained for Protestant missionaries some centuries later to produce the first complete Japanese Bible translation. In spite of this self-imposed limitation, the early Roman Catholic missionaries produced a wide variety of works which give ample evidence of their amazing command of Japanese and at the same time provide us with valuable information about the history of the Japanese language. It is due largely to the surviving examples of their printed books in romanized Japanese that we have as clear an idea as we do of the phonology and structure of Japanese at the end of the sixteenth century.

In Japanese historical linguistics the language of the Kamakura and Muromachi periods, from the thirteenth to the end of the sixteenth centuries, is termed Middle Japanese (*chūsei nihongo;* Mitteljapanisch). The linguistic standard during this period shifted in close step with political developments. Kyoto, though politically and militarily all but powerless during much of the period, continued to set a standard of prestige, even though it was one which was inevitably undermined by the shift in the site of *de facto* power to Kamakura, in the eastern Japanese dialect area. Then, with the shift back to Muromachi in Kyoto under Ashikaga rule, a corresponding prestige-oriented introduction of eastern dialect forms into the Kyoto language took place in turn.

The *Shin kokin wakashū* (*New Collection of Old and New Japanese Poetry*) was completed in 1206 and revised in 1210 by Minamoto Michitomo (1171–1227), Fujiwara Ari'ie (1155–1216), Fujiwara Sadaie (1162–1241), Fujiwara Ietaka (1158–1237), Asukai Masatsune (1170–1221), and the priest Jakuren (–1202). It is the eighth such official collection and comes at the beginning of the Middle Japanese period, but since in general Japanese poetry continued to be composed according to somewhat backward-looking phonological rules it is of relatively little importance for the history of the language. Of greater interest to the linguist is the *Hōjōki* (*Record of My Ten Foot Square* [*Hut*]) by Kamo Chōmei (1153–1216), written in 1212. Its author was a man who had seen his fortunes ruined in the disorders which marked the close of the twelfth century in Japan—"not a true ascetic, but a disappointed man who very sensibly made the best of his failure by living quietly in the country and consoling himself for his poverty by suitable Buddhistic reflections on Evanescence and the Hereafter." The work for which he is remembered is the best known of the *zuihitsu*, lit. "following the pen," essays and random reflections, frequently on religious themes, which comprised an important genre of the period. The *Kinkai wakashū* was a private collection of Japanese poems by Minamoto Sanetomo, the last of the Minamoto shogunate and celebrated as a poet. The *Uji shūi monogatari* (*Tales Gleaned at Uji*) is an anonymous collection of stories from 1215 in the *Konjaku monogatari* tradition and style, to which earlier collection about a half of its materials is to be related; its preface is prized for its style. The *Jikkinshō* (*Miscellany of the Ten Maxims*) of 1252 groups a similar collection of stories under ten moral principles of Buddhist origin.

The *Gukanshō* (*Jottings of a Stupid Man*) is an important work composed by Jichin (or Jien), an abbot of the Tendai sect, in 1220. It is unique as an early attempt not only at recording historical events but at interpreting and surveying them in terms of Buddhist beliefs and world view.

Most importantly, the Middle Japanese period is best represented by a large number of *gunki mono* or *gunki monogatari* "military romances," which deal with historical or quasi-historical events in a style that has been described as "more flowing and ornamental" than that of other works intended to be more history and less romance. The *Heiji monogatari* is one such work from the beginning of the thirteenth century, anonymous but attributed to Hamuro Tokinaga, Nakahara Moroyana, and Genzu Shōjō, dealing with the rebellion against Taira Kiyomori in 1159–1160. The *Hōgen monogatari* is of a similar date, and is probably from the same hand as the *Heiji monogatari.* ("Heiji" and "Hōgen" in both these titles are the names of the chronological periods whose events they relate.) Its subject is the succession struggles and factionalism between the Taira and Minamoto clans and in particular the events of 1156.

The most important of the military romances is the *Heike monogatari* (*Romance of the Taira*). It is also of unknown authorship and probably dates from the mid-thirteenth century, at any rate before another largely similar work, the *Genpei suiseiki* (*Record of the Rise and Fall of the Minamoto and Taira*). Both describe the power of the Taira clan in the second half of the twelfth century and their defeat at the hands of the Minamoto; they are in essence long narrative poems of an almost epic quality originally designed to be chanted to musical accompaniment. The later lyric drama tradition of the Nō drew heavily upon such military romances for both content and language.

The *Masukagami* (*Clear Mirror*), probably by Nijō Yoshimoto, dates from the second half of the fourteenth century and is a history of the period from 1180 to 1333; its title indicates its debt to the *Ōkagami* tradition. The *Izayoi Nikki* (*Diary of the Waning Moon*) is an unusual work written in 1280 by the widow of Fujiwara Tameie (1198–1275), describing in prose and poetry a trip from Kyoto to Kamakura which she undertook in 1277 to enter a plea with the shogunate there on behalf of an inheritance suit in which her son Tamesuke (b. 1263) had an interest; at the time she was in Buddhist vows as a nun under the name Abutsu. The *Tsurezuregusa* (*Grasses of Idleness*) is a collection of sketches (the "grasses" of the title) assembled around 1330 by Yoshida Kenkō (1283–1350), containing tales, anecdotes, and aphorisms on various aspects of human life. Kenkō lived during difficult years of political and social transition, and his book preserves the "stray notes . . . [of] a discontented man, uncomfortably stranded between two phases of society." The *Taiheiki* (*Record of the Great Peace*) is a long anonymous military romance now generally attributed to a monk named Kojima of the Enryakuji, a temple near Kyoto, who is said to have died in 1374. It deals with the unsettled reigns of the Emperors Daigo II and Murakami II (1318–1368) and the schism of the imperial line into rival northern and southern courts. Kitabatake Chikafusa's *Jinnō shōtōki* (*The True Lineage of the Divine Emperors*) of 1340 is a history which carries its narrative down to the year before its compilation, and stresses the claims to legitimacy of the southern court. The *Shinzoku kokin wakashū* (*New Continued Collection of Old and New Japanese Poetry*), completed by Asukai Masayo in 1438, was the twenty-first such official anthology to continue the tradition of the periodic collection of exceptional examples of Japanese poetry. The Nō masters Kan'ami (1333–1384) and his son Seami (1363–1444) began a tradition which has seen some of the most refined and involved productions in all literary history capitalizing on a characteristic Japanese ability to fashion a new total far more interesting than the sum of its parts out of commonplace materials. The *Soga monogatari*, an anonymous romance probably from the end of the fifteenth century, is a heroic tale of the revenge of the Soga brothers Sukenari and Tokimune for the murder of their father in 1193, and contains materials of great subsequent popularity in several different genres. The *Kyōgen* (*Mad Words*) were short theatrical farces, originally performed as interludes of comic relief in Nō programs, which began to be important about the end of the sixteenth century. Also from the sixteenth century are the *Shōmono* or *Shōmochi* (*Extracts*), compilations, generally by Zen monks, of extracts with notes and commentaries of a wide range of texts and subjects, including Confucian philosophy and Japanese history and literature. Some appear to have been prepared as notes for lectures, and hence provide valuable evidence for the language of the period.

The last quarter of the sixteenth century in Japan was marked by a series of power struggles that continued until finally another military administrator emerged with the necessary background, support, and power to rule the country effectively. This was the shogunate of the Tokugawa family, officially established in 1603 following a striking military victory by Tokugawa Ieyasu at the battle of Sekigahara in 1600. Three decades of trouble had culminated in this unification of Japan under the Tokugawas. Nobunaga had started the process by destroying for all time the military power of the Buddhist temples surrounding Kyoto. After his murder in 1582 Hideyoshi had continued the work. Hideyoshi was at first as receptive as all the Japanese, their rulers included, had been toward the growing Roman Catholic mission of the time. In 1587, however, he suddenly reversed his policy and began the first of a series of exceptionally thoroughgoing persecutions of the European missionaries and their Japanese converts. The proscription of Christianity which he decreed was to be a policy stoutly maintained throughout the entire history of the Tokugawa shogunate. Time after time increasingly severe measures were taken to root out every trace of the new foreign religion. In 1624 all Spaniards, both traders and missionaries, were expelled from the country. A series of civil disturbances by Japanese converts to Christianity in 1637 and 1638 strengthened the Tokugawa resolve to deal harshly with all who persisted in the new faith. The Portuguese were expelled from the country in 1639, and from 1640 on only the Dutch and the Chinese were permitted under certain conditions to conduct trade with Japan. All Christian proselytizing was strictly forbidden and the Protestant Dutch traders were called upon to give proof of their own enmity against the Roman Catholic Spaniards and Portuguese—often even being required to demonstrate this enmity by the characteristic Japanese test of trampling upon a crucifix or other Christian religious symbol. For Japanese and foreigner alike who persisted in the Catholic faith or who refused to give the now compulsory ritual indications of his rejection of Christianity, the authorities vied with each other in contriving new and revolting methods of torture and execution. Crucifixion was the most popular, as if somehow suited to the doctrines of the foreign religion ("let the punishment fit the crime"), but other inhuman refinements which sadistic Tokugawa officials were able to devise soon made even this seem like a quick and merciful dispatch.

The Tokugawa shogunate endorsed the orthodox Chinese Confucianism of the Sung period as its own official cult and embarked upon a policy of strict national isolation except for the carefully supervised and regulated trade with the Dutch and Chinese who came and went principally from Nagasaki and its environs. Japanese were forbidden to go abroad or even to build ships capable of sailing the high seas and the tiny country entered upon a long period of intellectual and cultural introspection.

The official endorsement of Confucianism was one of the causes of a great revival of Chinese language study in the middle and late Tokugawa period. For the first time in centuries Japanese scholars and statesmen once more addressed themselves seriously to the task of mastering written Chinese. A few even pushed their studies to the point of becoming interested in Chinese as a spoken language rather than solely as a medium for literary communication, went to Nagasaki, and attempted to learn spoken Chinese from some of the travelers and traders who could usually be found there. By and large, however, the new Japanese interest in the study of Chinese was confined to the literary form of the language, in which many scholars reached enviable levels of proficiency. Books written in Chinese by Japanese scholars on textual criticism of the Chinese classics and commentaries on other Chinese books were in some instances later circulated in China itself. Part of their vogue there must no doubt be attributed to their curiosity value, but there is ample evidence that they were also appreciated for both their style and their content. As the Ch'ing literatus Lu Wen-chao (1717–1796) put it on inspecting first hand some of the work of Japanese scholars of the Tokugawa period in Chinese, "I cried out in astonishment that a small foreign country should have anyone who can read books!" Others such as Yü Yüeh (1821–1907) more soberly reflected on their amazement that "at a time when in the Middle Kingdom but few had expounded upon the 'Ancient Learning,' it should already have been developed in Japan," in reference to some of the scholarly achievements of such men as the great and saintly Japanese Confucianist Itō Jinsai (1627–1705).

In 1657 a cadet branch of the Tokugawa family, in the city of Mito, began the compilation of a comprehensive history of Japan, the *Dai Nihonshi* (*The Great History of Japan*), written entirely in classical Chinese. The work was greatly aided by Chu Shun-shui (1600–1682), a Chinese émigré and Ming loyalist who had fled China in opposition to the rule of the Manchu dynasty; he served not only as a historiographer for the *Dai Nihonshi* but also as its linguistic supervisor. The style and level of accomplishment of the completed work are a tribute both to Chu's supervision and to the generally high level of proficiency in writing classical Chinese which Japanese scholarship attained in the Tokugawa period.

Tokugawa Japan also saw the development of striking popular cultures, especially in the great cities of Edo (modern Tokyo) and Osaka, and much important writing in Japanese. The popular culture, which centered especially around the theaters and the pleasure quarters of the flourishing Tokugawa cities, found its literary expression in the novels of Ihara Saikaku (1642–1693), the plays of Chikamatsu Monzaemon (1653–1725), and a large corpus of other works written in Japanese which gave expression to the ideals, aspirations, and interests of the Tokugawa townsmen. The Genroku period, from 1688 to 1704, found all the elements of the town culture of Tokugawa Japan at their most flourishing. Edo and Osaka alike had several important theaters going full blast, with both human actors and the large hand-operated puppets which are a characteristic development of the Japanese theater. Much popular drama started as reworkings of the aristocratic Nō plays, and the Kabuki stage of the Tokugawa cities with its human actors was, in turn, often devoted to reworkings of pieces originally written for the puppets. The rich literature of the Tokugawa townsmen's culture provides an impressive counterpart to the significant accomplishments of Chinese language scholarship and learning among the ruling classes during the same period.

Partly as a reaction against the great amount of official encouragement given to Chinese studies during the last part of the Tokugawa period, scholarly interest in older forms of the Japanese language increased, especially in early texts having some relation to pre-Buddhist and non-Buddhist forms of traditional Japanese religion. This linguistic interest was only one part of a gradual codification of the principal non-Buddhist elements in Japanese religion into what was now called Shintō—"the way of the gods." The early proponents and students of Shintō naturally turned to the study of some of the earlier specimens of the Japanese language.

The greatest of these scholars was the neo-Shintoist and pioneer Japanese philologist Motoori Norinaga (1730–1801), who produced a prodigious amount of commentary on nearly all the early Japanese texts. Modern studies of the Japanese language began with him.

Motoori was a remarkably bitter critic of the high esteem in which Chinese culture and Chinese language studies had traditionally been held in Japan. He believed in the innate superiority of Japanese culture and language, not only to Chinese but to any other. Motoori even produced his own "proof" for the barbarity of all non-Japanese sounds and of those languages which use them by noting what he supposed to be their popularity among brute creation and inanimate objects. "Beginning with the birds and beasts," he observed, "horses say *nii* and cows *moo*, lengthening their syllables in Chinese fashion." Motoori felt that it was significant that cats produced what he considered to be involved and Chinese-style vowel sounds, as in *niau*—as a matter of fact this is what the Japanese cat is held to say, unlike his more ambitious foreign cousins who are generally thought to attempt the bilabial *m*-. Motoori compared other Chinese sounds to the noises made by quacking ducks or croaking frogs. The inanimate objects which figured in his argument were mostly musical instruments. Examples of their versatility in producing Chinese-style sounds were, according to Motoori, the *ping* and *pong* of plucked strings; the *ching, chang, chong, gwang,* and *bong* of bells, and the *deng, dong, kang,* and *pong* of drums. On the other hand, Motoori said, no bird, beast, or inanimate object is capable of producing any of the fifty original sounds of Japanese; and the conclusion to be drawn from this was, for him, obvious.

In spite of the smoke screen which such chauvinism interposed between the man and his scholarship, Motoori did achieve remarkable results in the study of early Japanese, and much important subsequent work has consisted of following up suggestions found in his pioneering studies. From his work, for example, came the hint which led to the discovery of the eight-vowel system for the phonology of the earliest Japanese texts.

The language of the Tokugawa period, from the beginning of the sixteenth century to 1868, when the imperial court was moved from Kyoto to Edo (now renamed Tokyo, "the eastern capital"), is known in linguistic history as early Modern Japanese (*kinsei nihongo;* Neujapanisch).

During this period linguistic developments took place in rough parallel with political and social ones. So long as the imperial court in Kyoto was able to maintain any semblance of its theoretical historical importance, the western Japanese dialect group as represented in Kyoto speech continued to enjoy social importance and linguistic prestige. The speech of Osaka, another variety of the western Japanese dialect group, provided the basis for much of the literature and theatrical writing of that burgeoning center of the newly flourishing townsmen's popular culture. "Kamigata" (lit. "the region [*kata*] near the emperor [*kami*]," i.e., the capital and its surroundings) is a convenient term by which the Japanese often distinguish typical varieties of the western Japanese dialect group, as represented especially by the speech of Kyoto and Osaka, from other dialects and especially from the eastern Japan dialects.

The other linguistic focal point during the Tokugawa period was located outside this Kamigata region, and centered naturally enough in the city of Edo, where the Tokugawa military and administrative power was situated. As the Tokugawa supremacy became stabilized and the popular culture of Edo became a more and more vital factor in Tokugawa society, the once highly influential Kamigata dialects began to be eclipsed by the dialects of eastern Japan, most importantly by those of the great Kantō plain, and in particular by the language of the city of Edo, out of which evolved the modern standard language. The pattern of shift was a familiar one. As the headquarters of the effective military and administrative power shifted back and forth between the Kamigata areas of western Japan and the Kantō plain of eastern Japan, the locus of linguistic prestige followed in close pursuit, with plentiful borrowings in both directions remaining as lasting evidence of the pendulum-like movements of Japanese political and social history.

The last years of the eighteenth century brought American and Russian ships on increasingly frequent trips into Japanese waters and into unavoidable contacts with a Japan still hostile to all visitors. Internal political and social changes were now pressing the Tokugawa state, while increasing external pressure was being brought to bear to bring Japan back into the family of nations and onto the world scene. It might have been possible for the Tokugawa government to withstand either the internal pressure that its own political, economic, and social systems had developed or to withstand the new foreign drives from the outside, but it was impossible to stand up against both of these at once. By 1853 the American Commodore Perry had knocked at the doors and by 1856 the first American minister to Japan, Townsend Harris, had arrived and had to be dealt with. The pattern for Japanese intercourse with foreign nations that had been established in the Heian period with respect to T'ang China was about to be repeated with respect to America and Europe.

The first official Japanese mission left for the United States in 1860, and in 1867 the last Tokugawa shōgun made his formal resignation and "returned" the military administration of the country to the emperor. This was the Emperor Meiji, and the period from 1868 until his death in 1912 is known by his name. His coming into power is known officially as the Meiji Restoration, though the term is misleading: the emperors of Japan had not ruled for centuries, and there was little if anything for them to be restored to.

The Meiji Restoration was a period of intense political, social, economic, and intellectual change during which Tokugawa and Confucian Japan moved swiftly into the modern world. The Meiji government, always acting in the name of the emperor and constantly invoking the newly discovered charismatic powers of his office, made in quick succession a series of decisions and compromises which have determined the course of all levels of life in modern Japan. Actually, by an amazingly fortuitous historical accident, the Emperor Meiji himself seems to have been a person of intelligence and vision and a leader it would have been difficult to believe could have emerged from the centuries-old and tradition-ridden Kyoto court.

Basically, the Meiji government adopted a policy of attempting to combine the material successes and technological achievements of the West with a continuing commitment to orthodox Sung dynasty Chinese Confucian morality and ideals as developed and understood in Japan during the Tokugawa period. There was not supposed to be, and indeed there has not yet been, any Westernization in the sense of a radical departure from Japanese standards and values or an abandonment of Confucian ethics and patterns of social organization and behavior. The loom, the steam engine, and the telegraph were welcomed into Meiji Japan with almost indecent haste. The government pushed ahead with remarkable programs of compulsory literacy and education designed above all else to ensure that the Japanese who must now operate these fearsome mechanical devices of the West would do so with their ideals and values more firmly rooted than ever in the neo-Confucian system which had served Japan well for three hundred years of Tokugawa rule and which they saw no reason to jettison now.

This course of action had the great advantage of providing Japan with a firm spiritual and ideological basis which saved it from almost all the coming-of-age troubles which beset China and most of the other countries of the Far East as they moved out of the past into an industrialized twentieth century. Its greatest disadvantage was of course that at the same time that it provided the ideological basis for the rapid and superficial adoption of Western technology into Japanese life it provided few if any safeguards against the collision course which Japanese militarism set for the country in the late 1920's and early 1930's. Under increasingly rigid totalitarian control by rightist military groups, the newly revitalized Japanese nation soon found itself being propelled into a series of ill-conceived and ill-managed foreign adventures, first on the Chinese mainland, then throughout Southeast Asia, and finally into the entire Pacific area. By 1945 modern Japan had been reduced to economic and military collapse and underwent the final indignity of its first foreign military occupation, which continued until 1952. Since then the people and the nation have been searching, with no great success, for a set of standards and a consistent course of action which would serve postwar Japan as well as the combination of Western technology and Eastern ethics had served the Meiji government.

In the Meiji period Japan reopened itself to intercourse with foreign countries with a vengeance. At first the principal foreign language studied continued to be Dutch, a tribute to the persistence of the Dutch merchants and their constant presence in Japan during the Tokugawa period. But now, with generations of studying Dutch and the establishment of hereditary lines of Dutch language scholars and interpreters behind it, Japan was to react with stunned shock and surprise to the somewhat belated discovery that it was to be through still another European language—English—that its relations with the modern outside world would have to be carried on. The great intellectual impact which this discovery made upon the renascent Japanese intellectual of the time is well illustrated in the following extracts from the *Jiden* (*Autobiography*) of one of the great men of late Tokugawa and early Meiji Japan, the celebrated Fukuzawa Yukichi (1834–1901):

> One day [in 1859] I went to Yokohama for sight-seeing. There was nothing of the town of Yokohama then—a few temporary dwellings had been erected here and there as posts for the foreign trade, and in these the pioneer [foreign] merchants were living and showing their wares. To my chagrin, when I tried to speak with them, no one seemed to understand me at all. Nor was I able to understand anything spoken by any one of all the foreigners I met. Neither could I read anything of the signboards over the shops, nor the labels on the bottles which they had for sale. There was not a single recognizable word in any of the in-

> scriptions or in any speech. . . . I had been walking for twenty-four hours, a distance of some fifty miles, going and coming. But the fatigue of my weary legs was nothing compared with the bitter disappointment in my heart. I had been striving with all my powers for many years to learn the Dutch language. And now when I had reason to believe myself one of the best interpreters in the country, I found that I could not even read the signs of merchants who had come to trade with us from foreign lands. It was a bitter disappointment, but I knew it was no time to be downhearted.
>
> Those signs must have been either in English or in French—probably English, for I had had inklings that English was the most widely used language. . . . As certain as day, English was to be the universal language of the future. I realized that a man would have to be able to read and converse in English to be recognized as a scholar in foreign subjects in the coming time. In my disappointment my spirit was low, but I knew that it was not the time to be sitting still.

It was indeed not a time for the Japanese to be sitting still, nor did they. Soon Fukuzawa and a few hardy companions in study had begun the heartbreaking uphill struggle with their second European language—English.

> The pronunciation was naturally the most difficult part of all in the new language. The meaning and construction of a sentence was not so difficult. When, with the help of a dictionary, we replaced every word in the English sentence with a Dutch word, most of the sentences could be understood. . . . After a while we came to see that English was not entirely so foreign a language to us as we had thought. Our fear in the beginning that we were to find all our labor and hope expended on Dutch to have been spent in vain, and that we were to go through the same hardship twice in our lives, proved happily wrong. In truth, Dutch and English were both "strange languages written sideways," of the same origin.

Once Japan learned that English was necessarily to be the main vehicle for its contacts with the outside world, the nation turned to its study with the same enthusiasm (if not usually the same degree of success) that Heian Japan had in its own time so strikingly displayed with respect to Chinese.

The linguistic inheritance of the Meiji period and of modern Japan following it was a rich and complex one. Tokyo, as the new and increasingly centralized focus of national life, naturally supplanted the older Kamigata prestige standard with its own eastern Japan dialect. After 1868, with the establishment of the new imperial administration in Edo and the moving of the Kamigata-speaking court of the Emperor Meiji from Kyoto to modern Tokyo, the upper-class prestige dialect in the new capital was strongly influenced by a large number of borrowings of western Japan dialect forms into the eastern Japanese of the Kantō plain. But this very Kamigata speech of the now suddenly prestigious imperial court and administration had itself, by the time of the Meiji Restoration, been sizably infiltrated by plentiful eastern Japanese borrowings which dated from the centuries of Tokugawa rule. These now to some extent reentered the eastern Japan dialects, but this time in their Kamigata versions and under those forms which had resulted from subsequent independent developments within the Kamigata dialects. Out of this complicated pattern of shifting foci of prestige and changing courses of dialect borrowing, the foundations were laid for the modern standard language of the Meiji Restoration and later (*gendai hyōjungo;* Standardsprache der Gegenwart).

For its written language the Meiji culture soon evolved a somewhat simplified and concise but still elegant version of the older classical written language that had been in more or less continuous evolution and use since the Heian period. Basically, this written language consisted of the prose standard of the mid-Heian period minus forms and constructions that historically were limited to particular styles of texts or to particular kinds of prose. In the Meiji period this was enriched by wholesale infusions of neologisms coined in Japan from Chinese lexical materials, of loanwords from many European languages (but as time went on, more and more predominantly from English), and by a more difficult to identify but equally important stratum of loan translations from modern Western languages. The ultra-nationalists of the late 1930's and 1940's fought a somewhat pointless battle against what they considered the "foreign" elements in Japanese, and attempted a "purification" of the language by replacing European and American borrowings with loan translations and neologisms based, incongruously enough, on Chinese lexical elements. Thus, to replace *bēsubōru* from English "baseball" the neologism *yakyū,* using two Chinese loanword morphemes, *ya* "field" and *kyū* "ball," was coined. This is one of their "reforms" that has survived to the present time; it remains in the modern language in active competition with the original English loanword, and is actually favored above the loanword in newspaper usage since it requires less space to print. Less successful and far less durable were hundreds of other such official replacements for borrowings from what were at the time considered "enemy languages."

Of more lasting effect was the militarists' decision to ban the study of most modern European languages, particularly English, in Japanese schools during the 1940's. Modern Chinese was taught to a slight extent in the school system during this period, but the study of English was almost entirely abolished during most of Japan's involvement in World War II. This left postwar Japan with an unenviable inheritance of a serious linguistic handicap in all its dealings with the other nations of the world, and an entire generation's education was blighted by the results of this unbelievably shortsighted decision. Recently, there has been growing attention to Japanese literary expression and other written communication in a standard modeled upon the spoken language. This has meant an inevitable decline both in the usefulness of the old written language and in the number of persons who still can compose in it with any degree of ease and skill. Orthographic reforms carried out through the national educational system following the end of World War II have slightly simplified the approved orthography for Japanese and have severed another link with the cultural past.

Thus, Japanese today is for all practical purposes a single language, in which the old distinction between the literary language and the spoken language has become a fossil of interest only to literary historians, linguistic scholars, and antiquarians. The official language of Japan, for both speech and writing, is that variety of the Tokyo dialect officially defined by the Japanese national educational system and by such semi-official agencies as the state radio and television trust, as spoken by persons born and educated in some of the central parts of the metropolis, and as now written by them in a considerably simplified orthography using a limited number of Chinese characters together with the Japanese phonetic symbols known as *kana*. This is the single thread which modern Japan has managed to unravel, still in a continuous line of direct connection with the past, out of the richly variegated skein of her linguistic history.

Chapter 2

Genetic Relationship

The Japanese language, like the people themselves, must also clearly have come from somewhere. We are in total ignorance about how human language itself began anywhere in the world, and we will probably always remain so. Of all the many facets of human activity which we can study, that complex set of arbitrary, conventional human behavior which we call "language" resolutely keeps its ultimate origins most deeply hidden in the mists of prehistory. For the great, long-settled civilizations of the ancient world—cultures like some of those in the Near and Middle East or like China—this poses a serious and almost unsolved problem. These civilizations and their languages seem always to have been where they are (or were, historically), and any attempt to solve the problem of their ultimate origins immediately involves us in far-reaching speculations from which the cautious scholar is generally compelled to disengage himself, since the nature of such things raises questions toward whose solution no substantial evidence can be cited.

With Japanese, however, we are in a somewhat more fortunate position. Relative to the age of the earth's crust, the islands are new; and relative to the age of man, so are the people who live there. In these circumstances we are not faced with the conundrum presented by the long-settled civilizations of the ancient Near and Far East, and we are entitled to ask, what is it possible to say, in the present state of knowledge, about the relationship of Japanese to other languages?

Most languages are not found in total isolation from one another—they can often be shown to have what is commonly called a genetic relationship to each other. This way of describing the historical connections between languages is nothing more than a biological metaphor, taken over bodily as a linguistic term and sometimes also as a linguistic concept. What it means is simply that two or more languages existing today, or known to us from earlier periods through written records, can be demonstrated to be later changed forms of one earlier language, even though that earlier language is no longer available for direct observation and even though there are usually no written records of it.

This kind of genetic relationship can be demonstrated by what is called the comparative method, which involves the establishment of sets of regular correspondences between the languages compared in items of detail. This is the only way in which such a relationship between languages can successfully be shown to exist. Over-all resemblances in word order, syntax, or phonology contribute little or nothing to such a demonstration. Even though such resemblances may cause us to suspect a genetic relationship between languages, their precise historical affiliation must remain in doubt until detailed sets of correspondences can be established.

A number of purely chance resemblances always turn up when two or more languages are compared, and it is sometimes difficult to convince persons who have little or no familiarity with the methodology and principles of linguistic comparison that almost all these resemblances are accidental and completely without historical significance. All languages must operate with more or less the same kinds of phonemes, which may roughly be classified as vowels, consonants, and the like; they use forms which may be called verbs, adjectives, nouns, and so on—all this is simply because they are languages, not because of any particular relationship among them.

On the lexical level, these accidental resemblances take the form of what may be termed "look-alikes"—forms that resemble each other in sound and meaning but in which the resemblance is totally without linguistic significance. Old Japanese *kaF-u* "buy" certainly resembles German *kaufen;* and Old Japanese *Fone* (which probably goes back to a still earlier **pöne*) means "bone." Malay *mata* "eye" seems to resemble Modern Greek *mati*, which means the same thing, and further suggests Japanese *mabuta* "eyelid." Korean *manh-i* is "many," and *myëch* is "(how) much." All these resemblances are totally fortuitous. It is comparatively easy to persuade even the nonspecialist that such coincidences between individual forms are sheer accidents; but it is often more difficult to convince him that over-all resemblances in word order, syntax, or arrangements of phonemes can be and generally are of the same accidental nature and hence totally without significance for the history of the language. For example, if in Language A no words begin with vowels, and the same is true in Language B, before we base any far-reaching conclusions on this fact we should remember that to begin or not to begin a given linguistic form with any particular feature of the sound system of the language involves one chance out of two. So it is neither surprising nor significant that two or more languages opt for the same choice. The same can be said of over-all resemblances in word order: verb and object can appear either in that order or in its reverse, and again the chance is one out of two that one pattern or the other will occur.

Attempts to demonstrate a genetic relationship between Japanese and other languages are of long standing, but few of these have been sufficiently thorough, and the necessary sets of correspondences in detail are in most instances yet to be established. Amateur attempts, based on general features of over-all resemblance, have been made to associate Japanese with virtually every language and every language family in the world. Most of these attempts, including those which try to involve Japanese with Tibeto-Burman, Indo-European, or Malayo-Polynesian, have not been on a level of scholarship which need detain us here. The attempts to document a genetic relationship between Japanese and some other nearby languages of Asia are, however, of a somewhat different order.

A significant historical relationship between Japanese and Korean was proposed as early as 1717 by the celebrated Tokugawa Confucian scholar and statesman Arai Hakuseki (1657–1725). In 1781 Fujii Teikan, pioneer Japanese student of the Haniwa and precursor of modern archaeology in Japan, suggested a theory of the common origin of the two languages which has been further developed in more recent times, most notably by Kanazawa Shōzaburō in his *The Common Origin of the Japanese and Korean Languages* (1910). On the level of superficial resemblances, Korean and Japanese have many features in common, in both over-all phonological structure and gross syntactic patterning; but these are of course not sufficient to demonstrate their genetic relationship. In attempting to arrange these resemblances into significant data it is common to group them first according to broad semantic areas, and often also to attempt to identify what are sometimes spoken of as "basic vocabulary" items—words referring to things such as numbers, body parts, and the like which are felt to be so basic to human life that there is little likelihood of their being linguistic borrowings.

In the case of Japanese at least, this basic vocabulary concept is almost totally illusory. In the historical period Japanese can be shown without a shadow of a doubt to have borrowed just as widely and just as freely in these supposedly basic semantic areas as in any others, and there is little reason why the same process may not have taken place one or more times earlier in the history of the language. The great difficulty here seems to be that what is basic for one culture or one civilization at a given time in history may not be so basic at another time or for another people. Even with these reservations, however, if we follow the general assumption that the words for parts of the human body are in some way or other peculiarly immune to linguistic borrowing for most people at most times in their history, and draw up lists for such words which compare Old Japanese with modern Korean, or in some instances with earlier, Middle Korean forms derived from the philological study of written records, the resemblances which result are difficult to ignore.

Collections of this sort, bringing together words in the two languages which resemble each other more or less closely in sound or in meaning or in both, have long been available from several sources, but these vocabulary lists provided few significant data relevant to the question of the relation of Japanese and Korean. This was because they often included both the possible and the probable on equal terms. In some instances, the phonetic correspondences were close, or seemingly identical; in others, one or the other seemed a bit skewed; and in many others, an increasingly vivid imagination was required to see any similarity at all. But when there is no fixed methodology it is difficult to rule out any individual instance, since "plausibility" and "likelihood" of correspondence are insubstantial criteria which shade easily and imperceptibly from the almost unassailable through to the almost surely absurd.

Old Japanese	Korean
Fara "belly"	*pä* < *pɔy*
mï "body"	*mom*
Fone "bone"	*ppyë*
tume "fingernail, toenail"	*thop*
aki > *ago* "jaw"	*akali, akuli* < *akwi* "mouth"
kuti "mouth"	*kut*(*ëngi*) < *kut, kus* "hollow, cavity"
kimo "liver, spirit"	*him* "strength; sinew" (doublet with) *kim* "breath"
Furugi "scrotum"	*pul* < **pïhïl*
FoFo "cheek"	*pol*
titi "breasts"	*cëc*
kösi "waist, loins"	*hëli*
iF-u "say"	*ip* "mouth"

In view of these similarities, it is surprising that the numbers, except perhaps "one" (*Fitö-tu* "one," Korean *pilos* "beginning") and "two" (*ture* "companion," Korean *tul* "two"), show almost no correlation between the two languages.

Most recently, however, Samuel E. Martin has succeeded in bringing a large measure of order out of this chaotic situation, and in the process has almost surely provided a classic demonstration of the relationship of Japanese and Korean in terms of the rigorous sound correspondences of the traditional comparativists. Thus, he has been able to replace the always interesting but largely inconclusive lists of "look-alikes" in which the earlier literature abounded with a tight corpus of carefully culled correspondences, whose interlocking phonetic and semantic relationships insure the relevance of each part to the whole. Martin further refines his data by dividing the 265 sets of cognate items which he identifies between Japanese and Korean into three major categories: those items in both languages of equivalent meaning with close phonetic similarity; those of equivalent meaning and phonetically similar but divergent enough to require further comment; and those with close phonetic similarity but with somewhat divergent meanings. His 265 sets of cognate items have 102 forms in the most important first category, 80 in the second, and 83 in the third; it is of course the first category which provides a control over admission to either of the second, and so rescues his methodology from the dangers otherwise inherent in a series of imperceptible shadings from the "likely" to the "less likely."

With this rigorous system of comparison, something new to the field of Japanese-Korean comparisons, Martin is able as a result of his sets of correspondences to give some idea of the phonemic inventory and structure of the common language underlying the linguistic unity which his comparisons demonstrate—proto–Korean-Japanese. Its vowel system was rich, as might be expected both from the vocalization of Old Japanese and from what we know of modern and of the earlier stages of Korean phonology. The proto-language had **i*, **u*, **e*, **o*, **a*, **á*, **ɔ*, and **ɔ́*, appearing alone as syllabics and in various combinations with **y* and **w* (the comparative method does not enlighten us about what quality distinguished **a* from **á* or **ɔ* from **ɔ́*, but the distinctions are necessary to account for the correspondences). Initial consonants and clusters were relatively few: **x*; **p*, **t*, **ts*, **c*, and **k* alone and in clusters with **x* (**px*, etc.); **b* and **w*, also alone and in clusters with **x*; and **s*, **d*, **j*, **m*, and **n*. In non-initial position other consonants and clusters were found, notably **g*, **ğ*, **l*, **r*, **ř*, **š*, and clusters such as **-dx-*, **-mpx-*, **-lğ-*, and others.

With these rigorous sound correspondences, symbolized in terms of the proto–Korean-Japanese sound system sketched above, it is possible to use written forms for the items which can be demonstrated to have been common to both languages; thus, for the words for parts of the body cited above, the proto–Korean-Japanese forms as constructed by Martin are, in order, **párya*, **myom*, **p(Y)enye*, **txumpye*, **agɔ*, var. **agu*, **kutyi*, var. **kusyi*, **kimo*, **pɔğɔryi*, **pol*, **cyic(yi)*, **xeši*, and **ip-*. (Martin's **Y* is a symbol noting what seems to be a sporadic palatalization in certain Korean forms, perhaps due to dialect mixture.)

As a further example of how this reconstruction takes cognizance of and goes far toward solving some of the problems which have until recently plagued studies of Japanese-Korean relationship, the following forms may be cited, showing the reflexes of **s* initially (**s . . .*) and medially (** . . . s . . .*), and its contrast in this last environment with **š*.

			Korean	Old Japanese
*s . . .	*s*:*s*	**sYyima* "island"	*sëm* < *syëm*	*sima*
*. . . s . . .	*s*:*t*	**kes* "thing"	*kës*	*kötö*
*. . . š . . .	*l*:*s*	**mašu* "measure"	*mal*	*masu*

The sets of correspondences necessary to demonstrate genetic relationship are most impressive and valuable when they can be made to include details of morphology and syntax in addition to phonology. In morphology at least one striking correspondence between Korean and Japanese can be cited; this involves a common formant *-*i*, which appears as Korean -*i* and Old Japanese -*i*, and which is involved in an extremely complex and as yet incompletely described morphological process by which many of the verbs in both languages occur in paired sets, endoactive (often called "intransitive") verbs (*jidōshi*), and exoactive (often called "transitive") verbs (*tadōshi*).

In Japanese an example of one such set is (1) classical *kir-u* (modern *kire-ru*) as in *ito kiru* "the string breaks" (modern, *ito ga kireru*), an endoactive verb going together with (2) *kir-u* (both classical and modern) as in *ito o kiru* "break, sever the string." In other types of such paired sets there are still other differences, as for example (1) *nor-u* "ride (on a vehicle)" against (2) *nos-u* (modern *nose-ru*) "give (someone) a ride (on a vehicle)." The semantic relationship between the members of these paired sets and the historical origins of the entire process of derivation at work here await clarification, but even at the present state of knowledge it is possible to compare the morphological role of what seems to be an original common Japanese and Korean formant *-*i* for this kind of grammatical operation, as follows.

(1) Korean -*i*, used (a) to make exoactive verbs from endoactive verbs: *mëk*- "eat," *mëk-i*- "feed"; *cuk*- "die," *cuk-i* "kill"; *kkulh*- "be boiling," *kkulh-i*- "boil it"; the same formant is also used (b) to make endoactive verbs from exoactive verbs: *nanu*- "divide," *nanui*- "be divided"; *mo*(ï)- "bring together, gather," *mo-i* "come together, gather"; *tïl*- "hear," *tïl*(*l*)-*i*- "be heard."

(2) Old Japanese -*i*, used in similar fashion, in (a) sets of endoactive class I (*yodan* "quadri-grade") and exoactive class III (*shimo nidan* "lower bi-grade") verbs; here the formant -*i* appears in the -*a*+*i* > -*ë* of the indefinite form (*mizenkei*) of the exoactive verb: *tat-a*- "stand," *tat-a*+*i* > *tatë*- "erect (something)"; *sirizök-a*- "retreat," *sirizök-a*+*i* > *sirizökë*- "expel (something, someone)";

tagaF-a- "be different," *tagaF-a+i* > *tagaFë-* "break (promise, vow)"; *ir-a-* "enter", *ir-a+i* > *irë-* "insert (something)"; *ak-a-* "(something) opens," *ak-a+i* > *akë-* "open (something)"; the same formant is also used in (b) sets of exoactive class I and endoactive class III verbs, where it again appears in the *-a+i* > *-ë* of the indefinite form (*mizenkei*) of the endoactive verb: *tök-a-* "untie, melt down (something)," *tök-a+i* > *tökë-* (something) melts, comes undone"; *kudak-a-* "smash (something)," *kudak-a+i* > *kudakë-* "be smashed, broken"; *kir-a-* "cut (something)," *kir-a+i* > *kirë-* "be cut, severed." Further study of other features of this type will no doubt cast more light upon the precise nature of the relationship between the two languages.

All problems in the relationship of Japanese and Korean are complicated by the undoubted presence of a considerable number of old loanwords which continue to confuse the issue. Such loanwords turn up in unexpected places; in the oldest documents of the Japanese *kanbun* reading tradition, for example, there is evidence that the Chinese character *mao* "hair" was sometimes glossed *tore* in Japan, and that the Chinese character *chih* "tooth" was sometimes glossed *ni* (otherwise, "hair" would be Old Japanese and modern *ke*, and "tooth" would be Old Japanese *Fa*, modern *ha*). These forms *tore* and *ni* at once suggest Korean *thël* "hair" and Korean (*n*)*i* "tooth," but this can hardly be taken to mean that there is a still older layer of Old Japanese where these two basic vocabulary items were closer to Korean than they have been since. It probably means no more than that many of the early *kanbun* reading masters were Koreans, and that they often taught their Japanese students the Korean meaning for a Chinese character.

It is certainly clear that there are several levels of Korean loanwords in Japanese, and that these coexist in the Japanese vocabulary together with a small but considerably older layer of words which can be demonstrated to have a genetic relationship with Korean and which represent a common inheritance from a common background, possibly Altaic. To anticipate somewhat what follows below, there is good reason today to assign Korean to membership somewhere in the great language group of northeast Asia known as Altaic, which includes the three main subdivisions of Turkic, Tungusic (or Tungus-Manchu), and Mongolian. Considerable evidence also exists to indicate that Japanese is in some way related to this family. If all these suppositions are correct, a great variety of different kinds and degrees of relationship between Japanese and Korean are possible at one and the same time. Two words, one Japanese and one Korean, which resemble one another in form and meaning may be the result of sheer chance; they may both be borrowings, one into Japanese and one into Korean, from a third known or unknown original; they may be an instance of early borrowing from Korean into Japanese; they may be individual developments in each of the two languages of a single form inherited from the common Altaic background which Korean almost surely and Japanese most probably shares. Nor does this exhaust the possible variations in degree and variety of relationship for which provision must be made in any serious attempt to account for the over-all resemblances between Japanese and Korean. But in the present state in comparative studies involving Japanese and Korean it is still hazardous to attempt to separate these levels.

The loanwords, as distinguished from whatever evidence may remain for an earlier common genetic inheritance, might well be expected generally to be in the field of material and technological culture, especially when we consider the other evidence for important continental influences on the Yayoi and tumulus cultures. Inspection of the Japanese and Korean vocabularies for look-alikes in this general semantic area does not disappoint us, and the following is only a sample of what can easily be uncovered.

Old Japanese	Korean	Proto–Korean-Japanese
nata "hatchet, machete"	_nas_ "sickle"	*_nas_(_a_)
saFi "spade"	_sap_ < _salp_	*_salpyi_
kusi "skewer"	_koc_	*_kutsyi_
Fata- "dry field"	_path_	*_pataxye_
_Fo_ "ear of grain"	_pyë_ "rice plant, kernel of rice"	*_pYe_
sitöki "oval-shaped rice cake for religious offerings"	_ttëk_ < _stëk_	*_stegyi_
Fune "boat"	_pä_ < _pɔy_	*_pɔnye_
Fari "needle"	_panïl_ < _panɔl_ < _palɔl_	*_paryɔl_
yita "board"	_toli_ "crossbeam"	*_dyolya_
sakë "liquor"	_sul_ < _suul_ < _suïl_	*_swalğye_
naFa "rope"	_kkïn_ < _kkïnapul_ "piece of string"	*_nap_
nuF-u "sew"	_nupi-_ "to quilt"	*_nup_(_y_)-
susu "soot"	_such_ < _sus_(_k_)	*_sutsx_(_u_)
yari "spear"	_calu_ < _cɔl_(_o_) < _cɔlɔ_ "handle (of a spear, etc.)"	*_jaryɔ_
_wa_ "wheel"	_pakhwi_ < _pahoy_	*_ba_

It has recently been demonstrated, with considerable evidence if inevitably not to everyone's satisfaction, that Korean is genetically related to the Altaic family of languages. This relationship is particularly interesting and important since a number of the items cited even in the short lists above have striking parallels in some of the other and better-studied Altaic languages. The study of the entire family has been complicated by the fact that many of these languages have existed in close geographical proximity to one another over a long period of time, with the result that it is now extremely difficult to distinguish between vocabulary inherited from a common origin and borrowings from one language to another, especially since such borrowings took place in different directions at different times and were often completed at extremely remote periods. The problem is exactly that sketched above for Japanese and Korean, but rendered immeasurably more complex by the involvement of hundreds of languages over a vast range of geography and history.

The extremely complex relationships resulting from a common origin complicated by later involved borrowing and reborrowing over a long period of time have even caused some students to deny the entire hypothesis of a common origin for the Altaic languages and to attempt to attribute all resemblances between these languages to borrowings at one time or another. This is, however, still a somewhat extreme and clearly a minority opinion. The present consensus is that the Altaic languages do indeed represent a common genetic inheritance and that Korean is one of them.

That Korean is an Altaic language was first suggested by the great early European linguistic scholar H. J. Klaproth in his *Asia Polyglotta* (1823). Ever since his time the problem has been of interest to scholars both in Europe and in Japan, and it has been the subject of a large literature of extremely uneven quality in which, just as in the relationship between Japanese and Korean, much of the discussion has centered upon interesting but linguistically non-significant over-all resemblances in phonological structure, word order, and syntactic arrangement.

In almost all the considerations to date of the possible relationship of Japanese to Korean and to the Altaic languages in general, as well as in the study of the problem of the ultimate relationships of Korean itself, much has been made of the patterns of restricted occurrence for the eight-vowel system found in Old Japanese, which has often been compared with the widespread phenomenon generally called "vowel harmony" in the Altaic languages. It has often been claimed in the literature that this system of restricted vowel occurrence in Old Japanese was in effect a kind of vowel harmony, and that this is a significant factor for determining a genetic relationship between Japanese and the Altaic languages. But these studies have generally not come to grips with several basic issues. First among these is the problem of whether or not vowel harmony is an original, inherited feature in the Altaic languages, and hence represents a continuum from the Altaic common language, or whether it is an independent development in some of these languages, aided in its spread throughout the family by the same kind of borrowing and reborrowing that complicates the identification of vocabulary correspondences. The second major problem is whether or not, even if Altaic vowel harmony were an inherited common Altaic feature, and even if the eight-vowel system of Old Japanese were observed in the documents to be operating in a system which might also be termed vowel harmony, this would have any significance for the ultimate genetic relationship of Japanese to the Altaic languages.

Definite answers to these questions are still in the future, but indications are that both are to be answered in the negative. Vowel harmony is probably not an original common Altaic feature. Old Japanese has a system of limited occurrences for its eight vowel phonemes, but this is not actually very suggestive of the kind of thing which commonly is found in the Altaic languages. Even if it were, the value of such a general feature of phonological patterning for ascertaining genetic relationship would be almost nil. For Korean, students of the problem have generally not claimed to be able to identify any clear-cut phenomenon which could be termed vowel harmony; here instead more attention has centered on a few sets of vowel differences in semantically related morphemes which are often cited in the same general context as Altaic vowel harmony and the limited pattern of vowel occurrence in Old Japanese. The general implication is that all these phenomena have something in common and hence that they are significant for the over-all problem of genetic relationship, but they largely concern areas of such broad resemblance that they are almost impossible to confine within the precise limits necessary for serious comparative study. Some limitation on the occurrence of vowels or of any other class of phonemes can probably be identified in almost every language. Probably too almost every language has some identifiable patterns of vowel differences in related morphemes.

These are over-all features of the most general variety possible, and about their only relevance for comparative study is the fact—which must always be kept in mind—that their existence would and probably does further complicate the patterns of regular correspondence if and when such could be established.

Apart from the problem of vowel harmony, much has already been done toward establishing sets of detailed correspondences between Japanese and the Altaic languages. Here again, as with Korean, the existence of several levels of old loanwords in addition to a presumed level of commonly inherited vocabulary undoubtedly complicates the issue; nevertheless, it is possible to find an impressive number of regular correspondences. Of the many examples which could be cited here, perhaps the most effective is the following synopsis of an etymological study which Murayama Shichirō has recently published. It is particularly impressive in that he is able to demonstrate solid etymological connections in terms of sets of phonological correspondences in detail, for forms which in themselves do not particularly "look alike." This is always both a good test and an effective demonstration of the comparative method.

According to these sets of correspondences it is possible to connect Old Japanese *irö* "color; complexion, appearance" etymologically with Mongol *düri* "outer appearance; Gestalt" and at the same time with Old and Modern Turkish *yüz* "face."

Old Japanese has initial *ya, ye, yo, yö,* and *yu-*, but no **yi-*. But it is possible to reconstruct a still earlier Old Japanese **yi-* for words in Old Japanese initial *i-* both on the basis of the *man'yōgana* script (the inspection of written records) and also on the basis of internal reconstruction. This last involves doublets such as *yuk-u* against *ik-u* "go." In this way the earlier Old Japanese form **yirö* may be postulated as the point of departure for this etymology. Its initial **y-* corresponds regularly to Altaic initial *d-*: Old Japanese *yama* "mountain": Tungus (Evenki) *dawakīt* "mountain pass," Manchu *daban* "excess," Mongol *daba-* "climb a mountain," Mongol *dabagā* "mountain pass." Old Japanese *yo* "night": Common Tungus **dolbo* < **dol-bo* "night." Old Japanese *yö* "four": Common Tungus **dögin,* Manchu *duin,* Evenki *digin,* Mongol *dörben* "four," *döcin* "forty," cf. Old Turkish *tört* "four," Modern Turkish *dört.* Old Japanese *yu* "warm water": Tungus (Lamut) *dul-* "become warm," Tungus (Evenki) *dūl-* "make warm," Mongol *dulagān* "warm." On the shift of original **d-* here to Old Japanese *_y-_, cf. the comparison of Mongol _dulagān_ "warm" with Middle Turkish _yïlïγ_ "id."

Next, other examples of correspondences of Old Japanese _-i-_ in the first syllable of a morpheme with first-syllable _-ü-_ in Altaic may be cited as follows. Old Japanese _Firö_ "everywhere, near and far": Mongol _ülegǖ_, Middle Mongol _hüle'ǖ_ < *_pülegǖ_, Goldi _puloxo_ < *_pülękę_, Lamut _hulęk_ < *_pülękę_, Evenki _hęlękę_ < *_pülękę_ "many, in excess." Old Japanese _Fir-u_ "to break wind": Mongol _ülije-_, Middle Mongol _hüli'ē_ < *_püligē-_, Manchu _fulgije-_ < *_püligije-_ "blow." Old Japanese _mit-u_ "be complete, achieved": Mongol _bütü-_ "id.," Turkish _büt-_ "complete, finish." Old Japanese _tine_ "breast": Common Tungus *_tüŋgen_, Manchu _tunggęn_, Evenki _tiŋęn_, "id." Old Japanese *_wi-_ > Old Japanese _i-_ "be (_esse_)": Manchu-Tungus _bi-_, Mongol _bü-_ "id." Old Japanese _mitu_ "ability, capacity": Manchu _muten_ "id."

Next it is necessary to consider the several complicated sets of correspondences which Old Japanese _-r-_ involves. It is clear that at least two original liquids have fallen together in Old Japanese _-r-_, according to the following correspondences. (1) Old Japanese _-r-_ : : original *_-l-_: Old Japanese _yuri_ "later than the present, another day": Turkish _yulē_ "future" (< *_y-_). Old Japanese (non-standard) _yuri_, modern _yori_ "from (particle)": Turkish _-dulī_ "prolative suffix" (< *_d-_). _siri_ "buttocks": Evenki _sil_ "back of head," Mongol _sili_ "neck." _siru_ "sap, juice, soup": Evenki _silę_ < _silu_, Mongol _silün_ "meat soup." _uruF-u_ "become wet": Tungus _ula-_ "id.," Mongol _ulum_ < *_ulu-m_ "swampy place."

(2) Old Japanese _-r-_ : : original *_-r-_: _kir-u_ "cut" : : Tungus _gir-_ "id." _turu_ "crane" : Evenki _turuya_, Old Turkish _turuŋaya_, "id." _ura_ "rear side," Manchu _ura_ "hips, anus."

In the forms under comparison, Mongol _düri_ shows that here this instance is one of original *_-r-_ represented in Japanese by _-r-_ rather than original *_-l-_; but the next problem in turn becomes the correspondence of Turkish _-z_ and Old Japanese _-r_. This relates the entire etymology to one of the most complicated sets of Altaic sound correspondences yet to be worked out, but it is still on completely firm ground. In addition to original Altaic *_l_ and *_r_, as above, it is also necessary to reconstruct two additional original Altaic phonemes of this same general variety which however contrast with these two. For this second set of two, which we may designate as *l^2 and *r^2, the following correspondences have been determined (the examples cited here are only a sample from among many others which have been established).

(1) *l^2: Turkish -*š* : : Korean -*l* : : Chuvash -*l* : : Mongol -*l* : : Manchu -*l*. Examples: Turkish **taš* < *tāš*, Korean *tol*, Chuvash *čul*, Tungus (Orochon) *žolo* "stone." Turkish *yaš* "fresh," *yešil* "green," Korean *nal* "raw," Mongol *nilxa* "young," Manchu *nalu* "type of large-leafed vegetable eaten raw."

(2) *r^2: Turkish -*z* : : Korean -*l* : : Chuvash -*r* : : Mongol -*r* : : Manchu -*r*. Examples: Turkish *toz*, Korean *thikkïl* < *thïypkïl*, Mongol *toγusun*, Manchu *toron* "dust, dirt." Turkish *küz* "autumn," Korean *kyëul* < *kyëzəl* "winter," Chuvash *kĕr* "autumn."

In the etymology under discussion here, Turkish *yüz* shows that we must be dealing with an instance of original Altaic *r^2; but since Japanese corresponds to the entire set of Altaic **l*, **r*, *l^2, and *r^2 with only a single phoneme, Old Japanese *r*, it is always difficult to be sure how to assign Japanese cognates on the basis of the reflexes of these four Altaic phonemes alone. Many different Japanese correspondences have been suggested for various items in this segment of comparative Altaic phonology. Conservatively, the following additional instances may be pointed out, with Old Japanese *r* for *r^2: Old Japanese *kari*, Turkish *qaz* "wild goose"; Old Japanese *kökörö* "heart," Turkish *kökuz* < *kökü-z* "breast" (this -*z* is an old dual ending, cf. Turkish *kö-z* "eye"); Old Japanese *sir-u* "know," Old Turkish *sezik*, "doubt," Mongol *seri-* "become awake," Chagatai *säz-* "feel"; Old Japanese *Fur-u* "old, become old," Turkish *uzun* < **purun*, Mongol *urtu* < *hurtu* < **purutu* "long (of both space and time)"; Old Japanese *doro*, Turkish *toz* "dirt." Old Japanese *tiri* "dust, dirt" is also sometimes proposed here, but *doro* is probably to be preferred because of the vocalic correspondence. Its initial also fits in with Manchu *dahasun*, Goldi *daosun* "id."

Further correspondences establish the relationship of Old Japanese *ö*, in both first and second syllables, with Tungus *ę*, Written Manchu, Mongol and Turkish *e*: *omö* "mother" : Manchu *eme* "id.," Mongol *eme* "wife." *körös-u* "kill" : Mongol *kerčegei* < *kęrę-čegei* "cruel, fierce," Mongol *keregür* "a battle," Evenki *kęrčęme* "angry, crazed." *ötöröF-u* "old, become weak" : Mongol *ötel-* "become old," Evenki *utu* < *ötę* "old." *Fitö* "person" : Common Tungus **püktę* "child."

With this set of correspondences the etymology is completed, and it is possible to draw up the following summation.

Proto-Altaic **düre*:

Old Japanese *irö* < **yirö* < **yüre* < **düre* "color, complexion, face."
Turkish *yüz* < **yür* < **dür* < **düre* "face."
Mongol *düri* < **düre* "appearance, form."
Manchu, Goldi *durun* < **dürün* < **düre* "id."

The *-i* of the second syllable of Mongol *düri* is the result of the *-ü-* in the preceding syllable; the *-u-* of the second syllable of the Manchu *durun* < **dürün* is the result of assimilation to the *-u-* of the first syllable. The Mongol, Manchu, and Goldi forms have preserved the original Altaic initial; the Mongol and Turkish forms have preserved the original vocalization of the first syllable; the Mongol, Manchu, and Japanese forms have preserved the original medial consonant; and the Old Japanese final is a development of the original Altaic vocalic final for this morpheme. In this way each of the various languages can be shown to preserve a certain amount of evidence bearing upon one or more parts of the total reconstruction and, incidentally, upon their own genetic relationship with one another.

Another set of correspondences which involves Japanese with Altaic comparative phonology offers fairly impressive evidence for the relationship of Japanese to this language family. This involves the Japanese reflexes for the proto-Altaic initial palatal nasal **ń-*. As in the above instance involving Old Japanese *irö*, Mongol *düri*, and Turkish *yüz*, where the total demonstration is more significant than any of its parts because it provides a way for showing historical relationship among what otherwise seem to be dissimilar and unrelated linguistic forms, in the correspondences involving proto-Altaic initial **ń-* it becomes possible to bring together widely differing Japanese forms which, except for this comparative data, would seem to be unrelated within Japanese itself. This type of demonstration of an earlier historical unity behind what are at a later stage in the history of the language apparently unrelated forms is one of the chief achievements of the comparative method. A. Meillet described this in the following terms, "l'un des services les plus évidents que rende la grammaire comparée est de faire comprendre par une norme ancienne des formes anomales de l'époque historique. . . ." He was writing of Indo-European, but his point is of equal relevance for other language families.

Within the general semantic area of lexical items meaning "new, fresh" there are two main groups of forms in Japanese which stand side by side in meaning but are apparently otherwise unrelated to each other. The first group includes such forms as *aratame-ru* "revise, change to something new," *arata ni* "newly" (*ni* is a grammatical particle), and *arakajime* "beforehand, in advance." Together with this group also goes the extremely common adjective *atarashi-i* "new," in which the element *ara-t-*, *ara-k-* appearing in the forms just cited is seen in a metathesized version with the *-r-* . . . *-t-* sequence reversed to *-t-* . . . *-r-*. (The comparative evidence which will be cited immediately below also helps to show, incidentally, that it is this modern form *atarashi-i* which is the metathesized version of an earlier order—as shown for example in *arata ni* and *aratame-ru*—rather than the other way around.) The other group includes such forms as *nii-* < Old Japanese *niFi-* in *niizuma* "a new wife," *niikusa* "new grass (of the spring of the year)" and *niiname* "tasting the first fruits of the year," and *niwa-* in *niwazake* "newly brewed rice wine" (with *sake* "rice wine" in a combining form with voiced initial), and *niwaka ni* "suddenly, quickly."

The doublets *nii-* < *niFi-* and *niwa-* < *niFa-* are not difficult to associate with each other, though the exact process by which the vowel following Old Japanese *-F-* in the original **niF-* developed differently in different compounds is not completely understood. But in spite of their semantic closeness, *ara-* on the one hand and *nii-*, *niwa-* < *niF-* on the other seem to have nothing to do with each other at the present stage of the language, and within Japanese itself it is impossible to associate them.

Comparison of these words and others with Altaic materials shows, however, that we have here a regular pattern of development by which the proto-Altaic initial palatal nasal **ń-* developed into Old Japanese *n-* before vowel developments giving Old Japanese *-i-* and *-e-* in the first syllable, but into Old Japanese zero initial before vowel developments giving Old Japanese *a-* and *u-* (and possibly also *o-*, though the evidence here is incomplete) in the same first syllable. The precise course of the vowel developments in these changes remains partly obscure for the present, but it is possible to predict the development of the proto-Altaic initial **ń-* in terms of the vowel appearing in the Japanese reflex, which is significant.

Thus, with the element *ara-* of *aratame-ru*, *arakajime*, and *arata ni* we are to compare proto-Altaic **ńalawūn*, **ńalugar*, and **ńārai* "fresh." With Old Japanese *niF-* > *nii-* and *niwa-*, on the other hand, we are to compare proto-Altaic **nïgoγan*, as represented for example

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in Manchu *ńowaŋǵān* "green" and *ńōro-* "be green," probably also in Old Turkish *äwin, iwin* "fruit, produce of a tree." (Old Turkish has seen a development of this initial which represents a further development of the Japanese treatment; in Old Turkish the zero initial reflex has been generalized to appear in all contexts, alternating there with initial *y-* under circumstances not yet completely understood.)

Another set showing the same development is that consisting of Japanese *-aka* "dirt, filth, grime," as for example in *teaka* "dirt rubbing off on objects from the hands" (*te* "hand"), and *nigor-u* "become dirty, clouded, befouled," to be compared with proto-Altaic **ńagāsun* "pus," represented for example in Mongol *nijasun* "id." In the same way it is possible to connect Old Japanese *udu* > *uzu* "whirlpool" and *ned-u* > literary *nez-u,* modern *nejir-u* "twist, screw," with proto-Altaic **ńudurka* "fist."

As might be expected, both Japanese members are not always represented in some of the sets which this kind of comparison is able to establish; thus, only the Japanese forms in *n-* seem to be represented in *niger-u* "escape, flee" compared with proto-Altaic **ńeke-* "follow," Mongol *neke-* "follow, run after from behind," Middle Korean *nikë-la* < *nyë(kë)-* "go!"; *nigir-u* "clutch, squeeze in the hands," proto-Altaic **ńïk-u-* "knead," Korean *(n)iki-* "beat, knead," Old Turkish *yïq-* "beat, strike"; and *niram-u* "stare with a sharp eye," proto-Altaic **ńalbur-sun,* Mongol *nilbusun,* Old Turkish *yaš* "tears" (here from proto-Altaic *-*l^2*). Only the Japanese forms in initial zero appear to be represented in *aker-u* "open," Middle Mongol *ne'e* < **ńejē-* "id."; and *araF-u* "wash," Goldi *ńilūri,* Olcha *ńilu* "wash," Korean *(n)il-* "rinse, wash out."

One final striking set of correspondences involving Japanese reflexes of proto-Altaic initial **ń-* which may be cited is Japanese *yawaraka* "soft, delicate," Old Turkish *yïmšaq, yumšaq* "gentle, weak," Mongol *nimgen* < **nimken* "thin," from proto-Altaic **ńïm-,* against *nebar-u* "be sticky, adhesive" and Old Turkish *äwit-* "press, flatten out." The phoneme-for-phoneme correspondence between Japanese *yawaraka* and Old Turkish *yïmšaq* is remarkable, and both forms moreover show exactly the same suffix, with proto-Altaic *-*l^2*-, added to the original root **ńïm-*.

Just as in Korean, the many problems which these correspondences present are further complicated by large numbers of loanwords from the Altaic languages into Japanese, probably in several historical layers which it is still difficult to distinguish from each other. Again as in Korean, many of the comparisons which can be made between Japanese and the Altaic languages belong to general semantic categories which lead us to suspect that they are the result of protohistoric borrowings of cultural and technological terms, over and above the common inheritance from an earlier Altaic unity to which developments such as those of proto-Altaic **ń-* in Japanese give evidence. One such example has already been proposed above, involving *itako*, *ichiko*, and proto-Altaic **iduγan* "female shaman"; other important examples of such Altaic loanwords in Japanese which seem to be fairly secure include the following.

(1) Old Japanese *-kara* "family" in *harakara* "children of the same mother" (*hara* "belly, womb"), *ukara* "common descent group" (the *u-* here is obscure; is it from *um-u* "give birth to"?—cf. the doublets *um-u*, *mum-u* "id."), *tömokara* "companions" (in the *Bussokuseki* poems, 12), modern *iegara* "class, social status of a family" (*ie* "house, family"), appears to be a social organization term of Altaic origin. To be compared are Orochi, Goldi, Solon *xala* "a family," Manchu *hala* "exogamous social unit," Dagur *xala* "family," Old Turkish *qayas* "kin," Korean *kyële* < *kyëlɔy* "race, genetic stock."

(2) Old Japanese *udi* > *uji* "common descent group" also seems to be an Altaic social organization term. The ancient Japanese *uji* were "patriarchal units . . . , communities formed of a number of households of the same ancestry, or which, for the purposes of solidarity, claimed the same ancestry." Compare Korean *ul* "family, clan," Mongol *uru-q* "kin," Kirghiz *urū* "id.," Common Tungus *ur* "son," Buriat *uri* "descendants." Further developments of this same Altaic root are seen in Manchu and Mongol *use* "seed" and Tungus *uta* "son." There is also fragmentary evidence that this loanword may have coexisted in competition with an inherited form going back to the same Altaic original, to be seen perhaps in Ryukyu (Yaeyama) *utuza* "kin," Japanese (dialect of Hitachi) *utsuro* "a family," borrowed into Ainu as *utari* "family, children of a family."

(3) The characteristic burial mounds of the protohistoric Japanese tumulus culture were Old Japanese *tuka* > *tsuka*, which has survived in many modern place and personal names such as *ōtsuka* "great mound," *kaizuka* "shell mound," and so on. The word is clearly of Altaic origin: Middle Mongolian *dügün*, Khalkha **dügüži* > *DuDžị* "a small elevation," Korean *tuk* "a hill, mound, heap." On the vowel correspondence Mongol *ü* : : Korean *u* there is other parallel com-

parative evidence, as there also is for the initials here; for the final, compare Old Japanese *Fosi* > *hoshi* : : Mongol *odun* "star."

(4) We have noted above, in connection with the *Wei chih* account of early Japan, Old Japanese *hinamöri* "guard the boundaries." With this deverbal *möri-* compare Mongol *morïla*, "ride on horseback," a denominative verb based on *morïn* "horse." Japanese *nor-u* "ride," on the other hand, seems to go with Korean *nal-* "fly" and with Old Turkish *yäl-* "ride, gallop a horse."

(5) Old Japanese *tömo* "a leather object used in ancient Japanese archery" seems to be a word of Altaic origin. The problem of its etymology is first of all complicated by the necessity for determining precisely what the curious bulblike leather *tömo*, known both from Haniwa representations and from actual pieces preserved from the Nara period, was originally supposed to be. It usually consisted of a small hollow sack or bulb of sewn leather with leather tie straps, sometimes embossed with a comma-like decorative device (*tomoe*) of continental origin which either was a visual pun on the name of the object or perhaps took its own name from the object. There are two main theories about what the *tömo* was used for: that it was worn to prevent the bowstring from striking the archer's left wrist; or that it was worn in such a position that the bowstring, striking it upon release of the arrow, would produce a loud sound and thus strike terror into the hearts of opponents in combat. There seems little ground for choosing between what are probably little more than two ex post facto rationalizations. The Shōsō-in in Nara, an ancient imperial treasury of objects dedicated to religion and placed in the custody of the Tōdaiji by the the widow of the Emperor Shōmu at his death in 756, contains several ancient *tömo*. These seem larger and less practical-looking than those in the Haniwa representations, and one wonders if even by this time their original function had not become somewhat obscure. The Shōsō-in specimens were originally stuffed with ramie waste to preserve their bulbous shape and it is difficult to see how they could have served either as very effective noisemakers or as wrist guards. There is evidence that the original Shōsō-in bows were taken out of the famous storehouse and actually used in the military action of 764 which crushed the rebellion of Fujiwara Oshikatsu; somewhat later these pieces were replaced by facsimiles in order to fill up the Shōsō-in inventories. If this was also true of the *tömo* in this ancient collection it would help to explain why the Shōsō-in specimens seem so curiously

unpractical. At any rate, we may judge from their frequent appearance on the Haniwa figures that the *tömo* were ritual or fetish objects of considerable importance in early Japanese society, and their essentially testicular shape should not be overlooked in this connection.

The word goes with Middle Mongolian *tomuγa* "a twisted horse headdress," based on the verb *tomu* "twist, plait," and semantically from "[that] which [one] has twisted." It is also registered in Kalmuk *tom°γ°* "bag," and Ordos *t'omok͔* "little bag hung on a horse's head," which last form shows the original Altaic association with the protohistoric horse-mounted archers' cult and also helps to explain its developments in Japan, where its cultural and ritualistic associations apparently survived any memory of its original function and sense. But to learn more of the history of this word we would first of all have to know more of the history of the object itself. For example, some T'ang ceramic horse figures wear a sack or bag at the base of the neck, apparently a device painlessly but effectively to prevent the animal from suddenly throwing back its head; could this too be a distant echo of the original Altaic **tomo?*

(6) Old Japanese *katana* "single edged blade or weapon; a small sword" is to be associated with Altaic **kata-* "be hard" (Japanese *kata-i* "id."), as in Mongol *qada* "rocks, cliffs, crags," and *qata-* "dry up," with which we should compare Japanese *kata* "land hidden or revealed by changes in the tide" (as in the modern prefecture name Niigata), which preserves the original inherited Altaic root in its original sense. The *katana* was a new "hard" continental blade in contrast to the earlier "soft" ones of domestic manufacture. This is one instance where it is almost impossible to distinguish between the reflex of an inherited original form and a later loanword going back to the same original.

(7) Old Japanese *yöröFi* "armor" is a word with a complex history of its own within the Japanese language, but which goes back originally to an Altaic borrowing. Ultimately it is to be referred to Mongol *seleme*, Manchu *selemu* "sword, saber," from *sele* "iron" and seen with *-ö-* vocalism as *sölö* in many of the Tungus dialects. In Old Japanese this was borrowed with a reflex of the *-me/u* suffix and original *-ö-* vocalism as Old Japanese *söröFi*, where it was then contaminated semantically and phonetically with independent Old Japanese *söröFi* "a set, a suit," deverbal from *söröF-u* "be complete, be equipped," and further with *yösöFoFi* "array, dress, equipment," deverbal from *yösöFoF-u* "attire, dress." This last was itself a double enlargement

from the exoactive verb *yös-u* going with endoactive *yör-u* "approach," *yösöF-u* > *yösöFoF-u,* which in turn induced further semantic contamination with *yör-u* and its derivatives. In this way the borrowed *söröFi* was remodeled into *yöröFi* on the basis of its association with these derivatives of *yör-u.*

(8) Other articles of early Japanese dress and material culture for which convincing Altaic etymologies are forthcoming include *kutu* "shoes," *Fukuro* "sack" (to be considered in connection with the baggy trousers of some of the Haniwa figures), *kötö* "horizontal stringed musical instrument," and *kara* "handle" (distinguish *-kara* "family" above). Altaic etymologies for all these are available in recent literature and need not be repeated here. Old Japanese *kutu* probably involves relationships which go far beyond Altaic and point in the ultimate direction of Old French *bote,* Medieval Latin *botta,* Middle English *bote* "boot," Latin *botulus* "intestine" (probably an Oscan-Umbrian loanword in Latin), Gothic *qiþus* "stomach," and Old English *codd* "case" (as in later "cod-piece"), < Indo-European **g*$^{\underset{\frown}{u}}$*ot-*, **g*$^{\underset{\frown}{u}}$*etu-*.

(9) Old Japanese *kaũdi* > *kaudi* > *kōdi* > *kōji* "yeast" shows significant parallels with Mongol *köröŋge* < **köñerge,* Middle Mongolian (ḥPhags-pa script) *könörge,* Monguour *k'uonorguo*—all "yeast." Here the Japanese shows the same premetathesis consonantal order as Middle Mongolian and Monguour, against the order in modern Mongolian.

(10) Reference has already been made to the Haniwa, the low-baked unglazed ceramic figures and objects which decorated the slopes of the great burial tumuli upon which the aristocratic cult of protohistoric Japan was focused. The early Haniwa were simple clay cylinders pierced with holes through which ropes of twisted grasses and plant fibers were most likely passed, to keep the Haniwa erect and also to make the whole arrangement into a kind of "spirit fence," useful both for keeping the spirit of the departed in its proper place inside the tumulus and for preventing encroachments into the sacred precincts of the tumulus from the outside.

Early lexical and literary sources agree that Old Japanese *Faniwa* means "clay rings" or "earthen tubes," but explanations differ on how the form *Faniwa* is to be analyzed and also on exactly what resulting segment of the form means "clay." The final element *-wa* is generally identified as "ring, circle, tube," and of this there seems to be little doubt; but some sources say the element *-ni-* means "earth," others that it means "red in color; hence, red earth." Still others would identify the morpheme *Fani-* as meaning "red earth," particularly a variety used in the protohistoric period to make such ceramic objects and also to stain fabrics. This form *Fani-* seems to have one ablaut doublet *Fena,* and still another ablaut doublet in the *-Foni* of Old Japanese *söFoni* which clearly means "very red earth" and in which the initial *sö-* is an otherwise well-attested Old Japanese intensive prefix.

About all that can be abstracted out of all this is a general comparison of the ablaut elements represented in Old Japanese *Fan-* and *-Fon-* with proto-Altaic **pun-*, **pün-*, **pul-* "fire, red," an original root with good representation in Korean and Tungus. (Perhaps Old Japanese *Fi* "fire" and *Fï* "day" also belong in this same set.) With the *-wa* of *Faniwa,* and with initial consonantal ablaut also Old Japanese *ma* "round," we may compare Korean *pa* "rope." Or the possibility may also be considered of a syncopation of an earlier form **FaninaFa* involving Old Japanese *naFa* "rope," to be compared with Korean *no, no*(*na*)*-kkïn* "string."

(11) With the introduction of Mahāyāna Buddhism, initially through Korea and somewhat later directly from China, it became necessary to add a loanword to the Japanese vocabulary for the chief object of reverence in the new continental religion; the result was Old Japanese *Fotökë* "Buddha." In most modern dialects, including the standard language, this has come to have the additional specialized sense of "anyone deceased; in particular, the corpse at a wake or cremation" besides continuing to be used in the sense of "Buddha."

The ultimate source of Old Japanese *Fotökë,* Okinawa *hutuki,* and Yaeyama *kutui* is clearly to be sought in the same Altaic original represented by Mongol *qutuγtu* "reverend one; living Buddha," and its borrowing into Manchu as *hutuktu;* perhaps also to be considered here are Old Turkish *qut* "majesty, spirit," with which in turn Old Japanese *kötö* "spirit, deity" (as in *mikötö* "honorific title of gods and high ranking persons") may be connected as a genetically related form rather than as a loanword. This would explain the different treatment in the initial, with Old Japanese *F-* in the loanword but Old Japanese *k-* in the inherited morpheme.

(12) Even the name for the vehicle by which this layer of Altaic loanwords reached the Japanese islands has been preserved; Old Japanese *kayi* > *kai* "rudder" is of Altaic origin, going with Turkish *qayïq* "boat," the most common word for a small boat in the Turkish languages. Kirghiz, Kazak, Uzbek, Nogai, Bashkir, and Turkish all

have *qayïq;* Kumyk has *k'ayïk*, Tatar *kaek*, and modern Uighur *keyik*, whereas Oirot *qayiq* is also recorded, significantly, in the sense of "oar." This is the ultimate source of Eskimo *qayaq*, from which the word has entered most modern European languages; its history and distribution have recently been traced in a study by Denis Sinor. Old Japanese *Fai* > *Fë* "ship" in *Fësaki* "bow of a ship" preserves still another Altaic form, of which apparently only one other reflex has survived, the thirteenth-century Middle Mongolian form recorded by Ibn Muhannā in Arabic script as *haiǰuγa* "boat." Note that *kai* "rudder" goes back to an earlier *kayi*, since the sequence *a* + *i* produced *ë*, as here in *Fë*, and in the endoactive-exoactive verbal formant combinations with *-i* cited above in connection with Korean.

The process by which such cultural loanwords entered Japanese can be documented to some extent from both the *Kojiki* and the *Nihon shoki* in the story of the celebrated Achiki (Old Japanese *atiki*), who came to Japan from the ancient Korean kingdom of Paekche, known to the Japanese as Kudara, as the escort for a present of two particularly fine horses from the king of Kudara to the "king of Japan." His name is immediately to be connected with Old Turkish *atlïγ*, "horseman," with a development of *-tl-* > *-t-* reminiscent of the development of Old Turkish *at* "horse" from earlier **akt.*

Achiki did not stay in the stables long after he arrived in Japan. Like all the early Korean and Chinese visitors, he at once was able to capitalize upon his knowledge of Chinese language and script, and the sources report that he was much prized by the Japanese as a scholar. It would be interesting to know how much an ancient Korean stable groom could have known about scholarly matters, but he even served as tutor to the heir apparent of the Emperor Ōjin. It is also supposed to have been on his recommendation that Wani, the first full-time scholar of the Chinese classics, came to Japan from Korea.

According to the traditional chronology Achiki arrived in Japan in 404; the horses he brought to Japan are supposed to have been sent in return for an earlier gift sent from Japan to Korea in 368. Thus we are able to establish a tentative date for this borrowing of some unidentified Korean form going with Old Turkish *atlïγ*.

Almost every one of these comparisons with Korean and with the other Altaic languages raises many still unsolved problems. A few of the comparisons are probably only fortuitous look-alikes, but in total they nevertheless represent a considerable body of comparative evidence which only requires more careful treatment in the future to reveal more about the ultimate genetic relationship not only of Japanese but of the other languages involved as well.

The technique of glottochronology or, as it is sometimes called "lexicostatistics," has in recent years attempted to develop a means for estimating the elapsed time following the separation of an earlier common language into later changed forms, somewhat along the lines by which carbon-14 dating now provides a technique for measuring the age of archaeological specimens. The application of glottochronology to Japanese still leaves many unsolved problems, both theoretical and practical; perhaps the greatest drawback is the fact that the technique has to date been evolved largely with Indo-European linguistic materials. This problem is particularly troublesome, because it is largely with Indo-European languages that the value of r, the percentage of cognates assumed in glottochronological calculations to remain after the elapse of a thousand years, has been measured; it may well be that somewhat different values ought to be employed for r in languages of strikingly different typology, such as Japanese.

Even with all these drawbacks, it is useful to note what the glottochronological techniques as presently available tell us about the probable time elapse between the present and a presumed earlier Korean-Japanese unity. It must be emphasized that glottochronology tells us nothing at all about whether or not languages are related; it measures the time elapsed since their separation under the assumption that they were once the same, but it provides no information of any kind on the problem of whether or not this genetic assumption is correct. If the genetic assumption is false, of course, the time-lapse figure provided by glottochronology is completely pointless since in that case there never was any earlier unity.

With this in mind, and assuming for the purposes of the calculation that Korean and Japanese do indeed go back to an earlier Korean-Japanese common language, the glottochronology technique computes t, millennia of time depth, $= \log C/(2 \log r)$, where C is the percentage of cognate forms recognizable in the "Swadesh 200 list"—a list of "basic" vocabulary items thought to be generally resistant loanwords—and r is the percentage of cognates assumed to remain after a thousand years, usually estimated as 80.5 per cent. The resulting time depth for Japanese and Korean is 4632 years, ±379, with C = .1344. It is interesting to compare this figure with some of the carbon-14 dates available for Japanese archaeological sites. A Middle Jōmon shell mound in Chiba Prefecture studied by Groot and Shinotō has yielded objects which have provided the carbon-14 dates of 4526 ± 200, and 4513 ± 300. Objects from an early Middle Jōmon site on the campus of the International Christian University, outside Tokyo, not excavated scientifically but uncovered in the course of demolishing an old garden on the site and replacing it with (of all things) a golf course, have been carbon-14 dated as 5105 ± 65. It must again be stressed that the glottochronological calculation itself is absolutely no guarantee of genetic relationship; but it does indicate that if such a relationship did indeed exist between Japanese and Korean, it was severed about four and a half millennia ago, sometime around the Middle or early Middle Jōmon period.

Similar calculations are also possible for Japanese and Manchu and for Manchu and Korean. In the first, $C = .0680$ and $t = 6195$; in the second, $C = .0899$ and $t = 5550$.

There is, however, no need to look this far afield for other languages genetically related to Japanese. Rich evidence for such genetic relationship can be found far nearer to the home islands. This evidence is of great value both for its own sake and also because it is well enough controlled to eliminate many of the uncertainties and doubts which still plague most of the comparisons of Japanese with Korean and Altaic.

On the island of Okinawa as well as on other smaller islands in the same general area—such as the Amami ōshima group, Miyakojima, and the Yaeyama group—there still remain evidences of a considerable number of languages whose close relationship to Japanese cannot be doubted. Until the end of World War II, while these regions were still part of the Japanese empire, the advance of the Japanese language into this area was remarkably effective, and two decades of postwar occupation, this time by English-speaking military forces, have continued the pattern set by the original Japanese administration for the total obliteration of these languages. Some varieties are, however, well enough recorded to provide striking evidence that there have long been languages here which are related to Japanese and which together with it are later changed forms of an original common language.

Comparative studies of all these languages, both as a self-contained group and together with standard Japanese, have not yet advanced to the point where a proto-Japanese, the common original language from which all these are later changed forms, can be reconstructed in any detail; but the correspondences which can be established in phonology, morphology, and syntax are plentiful and striking. In phonology, for example, these correspondences even provide precise correlations in such details as the suprasegmental system of high and low pitch contrasts.

Best recorded for comparative purposes among all the languages of Okinawa and the adjacent region is the language of Shuri, the old royal capital of the Okinawan kingdom. The most characteristic feature of the Shuri language compared with standard Japanese is that the sequence of vowel plus the laryngeal link phoneme /'/ plus vowel regularly corresponds to the single-vowel syllable of modern standard Japanese. This is the phenomenon which the first serious student of the language, Basil Hall Chamberlain, described with characteristic candor and charm: "The Luchuan long vowels are phenomenally long. . . . Start a Luchuan on a long vowel, and you would think that he regretted ever to let it go. . . . Japanese long vowels are long enough, but they are not to be compared to the Luchuan."

Chamberlain's terminology here is perhaps not the most precise, even by the standards of amateur linguistics of the late nineteenth century, but at least he leaves no doubt in the mind of his reader as to exactly what he was talking about.

The same phenomenon is also known from some of the modern southern dialects of Japanese in the home islands, where the vowels of open syllables tend to be long in comparison with the standard language. It is responsible, for example, for such *man'yōgana* orthographies as *kii no kuni* for *ki no kuni* "the land of Ki" (a literary term for the Wakayama area), and can be traced in the written sources considerably further back.

This development apart, the correspondences between the single-vowel phonemes in Tokyo and the Shuri language are of remarkable and significant uniformity. Tokyo *a* corresponds to Shuri (hereafter, Sh.) *a;* Tokyo *e* and *i* in all positions : : Sh. *i;* Tokyo *-u* after *ts-*, *z-* and *s-* : : Sh. *i;* Tokyo *-u* in other positions and Tokyo *-o* : : Sh. *u.*

(1) Tokyo *a* : : Sh. *a*: *na* "name" Sh. *na'a; ha* "tooth" Sh. *ha'a; hana* "nose" Sh. *hana; ana* "hole" Sh. *ana; kawa* "skin" Sh. *ka'a; sara* "dish" Sh. *sara; kata* "shoulder" Sh. *kata; wara* "straw" Sh. *wara; mane* "imitation" Sh. *mani.*

(2) Tokyo *e* : : Sh. *i*: *me* "eye" Sh. *mi'i; ne* "root" Sh. *ni'i; ke* "body or animal hair" Sh. *ki'i; te* "hand" Sh. *ti'i; ebi* "shrimp" Sh. *ibi; are* "that one" Sh. *ari; kaze* "wind" Sh. *kazi; hane* "feather" Sh. *hani; sake* "rice liquor" Sh. *saki; kemuri* "smoke" Sh. *kibusi.* The

Tokyo *-r-* : : Sh. *-s-* correspondence here needs further study; other evidence for this correspondence points to the existence in the original common language of a phoneme or phonemes now lost from both Tokyo and Shuri. There is also the possibility of a further correlation with pitch-contrast or other phonemes, segmental or suprasegmental.

(3) Tokyo *i* : : Sh. *i*: *hi* "fire" Sh. *hwi'i; chi* "blood" Sh. *ci'i; ni* "burden" Sh. *ni'i; hiru* "daytime" Sh. *hwiru; ishi* "stone" Sh. *isi; iki* "breath" Sh. *i'ici; si'i* "edible fungus" Sh. *si'i; mugi* "barley" Sh. *muzi; mimi* "ear" Sh. *mimi.*

(4) Tokyo *u* : : Sh. *i*: *su* "nest" Sh. *si'i; suna* "sand" Sh. *sina; tsume* "fingernail or toenail, animal claw" Sh. *çimi; suji* "sinew" Sh. *şizi; tsuyu* "dew" Sh. *çi'ju; tsuno* "animal's horn" Sh. *çinu; mizu* "water" Sh. *miz̧i; itsu* "when" Sh. *içi.*

(5) Tokyo *u* : : Sh. *u*: *yu* "hot water" Sh. *ju'u; kumo* "cloud" Sh. *kumu; kubi* "neck" Sh. *kubi; ushi* "cow" Sh. *usi; futa* "cover, lid" Sh. *huta; mushi* "insect" Sh. *musi; fune* "boat" Sh. *huni; ude* "wrist" Sh. *udi; fuyu* "winter" Sh. *hu'ju.*

(6) Tokyo *o* : : Sh. *u*: *ko* "powder" Sh. *ku'u; ho* "ear of grain" Sh. *hu'u; tori* "bird" Sh. *tu'i; yoru* "night" Sh. *juru; kimo* "liver" Sh. *cimu; koto* "thing" Sh. *kutu; tokoro* "place" Sh. *tukuru; tō-i* "far" Sh. *tu'usaN; kyō* (< *keu* < *keFu*) "today" Sh. *cu'u.*

Sequences of vowels in Tokyo have various correspondences in Shuri; Tokyo *ai* and *ae* both correspond, for example, to Shuri *e'e*: *ai* "indigo" Sh. *e'e; hai* "housefly" Sh. *hwe'e; mae* "front" Sh. *me'e; kaer-u* "return" Sh. *ke'e'ju'N; kaer-u* "change" Sh. *ke'e'ju'N; kangaer-u* "think" Sh. *ka'Nge'e'ju'N.* Tokyo *ao* and *owa* correspond to Shuri *o'o*: *sao* "pole" Sh. *so'o; ao-i* "blue, green" Sh. *o'osa'N; yowa-i* "weak" Sh. *jo'osa'N.*

These comparisons show also that the Shuri vowel system is "newer" than the Tokyo one. This runs counter to the usual popular tendency in Japan (and elsewhere, for that matter, in similar situations) to consider outlying, non-standard languages and dialects as necessarily "older" than their related central standard languages or dialects. This last is of course not a scientific statement from the outset, since both the languages being considered are of equal age, which is to say that both are modern, living languages and in this basic sense it is impossible to say that one is "younger" or "older" than the other. In terms of their relation to the now lost and still unreconstructed common original of which they are later changed forms, however, it is possible to speak of "younger" or "older" in the sense of which is more and which is less changed from this original. In this linguistic sense it is clearly the Shuri vowel system here which is younger, and Tokyo vowel system which is older. Any other conclusion would make it impossible to construct a regular pattern for the developments of sound changes between the two. This is an interesting conclusion, since it contradicts the popular assumption that non-standard languages and dialects somehow preserve an earlier state of things than do the standard ones. Such preservation of earlier features ("archaism") no doubt sometimes does take place in lexicon and in other features as well, but this does not by any means rule out other changes which may still, as here, make the non-standard language or dialect linguistically younger.

The close genetic relationship of the Shuri language of Okinawa to modern standard Japanese is perhaps most clearly seen in its suprasegmental features of significant high and low pitch contrasts. Hattori Shirō, to whom we owe most of our information about the languages and dialects of Okinawa, and who has done most of the important work comparing standard Japanese with its cognates in the Okinawa area, has been able to establish regular correspondences in these suprasegmental features between Shuri and Tokyo, between these two languages and the modern Kyoto dialect, and with a late Old Japanese dialect of the last century of the Heian period as recorded in the *Ruiju myōgishō* (*Classified Glossary of Words and Meanings*), a text by an anonymous priest which was completed shortly after 1081. This text records the pitch contrast system of the time in the classical Chinese phonological terminology for the Chinese tones, *shang* "rising," *p'ing* "level" and *chü* "departing," to which it adds the further qualifiers *ching* "light" and *chung* "heavy."

The following comparative table of eight sets of correspondences can be drawn up for the modern standard language, the late Old Japanese written records, and the Shuri language. Data for the modern Kyoto dialect could also have been included here, since the correspondences with this dialect also are regular, but since this would require setting up an additional ninth set of correspondences they have been omitted to keep the table simple. The pitch contrasts for the Tokyo forms are indicated with a grave accent over the vowel (*à*) for that syllable on which there is a fall in pitch from high to low; unmarked vowels are low or, in words that have no fall in pitch, high, according to the pitch rules for this dialect, explained below.

In several important features, comparison of the Shuri language with modern standard Japanese also corroborates our knowledge of some of the earlier stages of Japanese phonology, which without such comparison would almost totally depend on the inspection and interpretation of written records. Thus, largely on the basis of written records, two different syllable-initial sequences, (1) **wo* and (2) zero initial (or initial laryngeal /'/) plus *o*, have been postulated for Old and late Old Japanese. Even without the orthographic tradition and the written records it would be possible to reconstruct the same contrast between these two different initial sequences involving *-o* from comparisons between standard Japanese and Shuri. In these comparisons this distinction appears as a difference in the initials in the Shuri forms, those going back to earlier **wo* having Shuri zero (or laryngeal /'/) initial, and those going back to an earlier zero (or laryngeal /'/) initial having the Shuri initial glottal stop: (").

Tokyo	(1) *a*	(2) *a*	(3) *à*	(4) *à*
Late Old Japanese	(rising)	(rising [light])	(level [heavy])	(departing)
Shuri	(falling)	(falling)	(level)	(level)
Tokyo	(5) *aa*	(6) *aà*	(7) *aà*	(8) *àa*
Late Old Japanese	(rising-rising)	(rising-level)	(level-level)	(level-rising)
Shuri	(falling)	(falling)	(level)	(level)

**wo* > *o* "thong"	*oke* "bucket"	*ono* "ax"	*or-u* "be"	*or-u* "bend"
Sh. *'u'u*	*'u'uki*	*'u'u'N*	*'u'N*	*'u'u' u'juN*
*(/'/)*o* > *oku* "interior"	*oto* "sound"	*oya* "parent"	*oni* "devil"	*obi* "belt"
Sh. *"uku*	*"utu*	*"u'ja*	*"uni*	*"u'bi*

Linguistic relationship is demonstrated by such sets of correspondences in items of detail, particularly in phonology. Without this kind of evidence it is impossible to make valid judgments on historical origins or connections, regardless of how many or what variety of look-alikes may be identified between two or more languages. To state this is simply to recapitulate the methodological assumption inherent in the presentation above and to reiterate the necessity for presenting some of the comparative materials involving Japanese with Korean, the Altaic languages, and the Shuri language of Okinawa which have just been given in broad outline. But it is also important to notice that the converse of this basic proposition is not necessarily true. It is possible to have hundreds of sets of correspondences between languages in matters of precise detail, including phonology, and still not be dealing with genetically related languages. Here too Japanese provides materials which are of interest not only to the specialist in

Japanese but to the general linguist as well since they show clearly not only the strengths but also—and equally important—some of the weaknesses of the classical methodology of the comparative grammarians.

If we were to approach the problem in total ignorance of the history of the two languages and without any information about their long period of close contact with one another—and such blind investigations of languages are more often than not necessary in comparative linguistics, since we rarely have the rich historical documentation that is available for China and the Far East—it would be almost impossible to avoid the conclusion, on the basis of the assumptions of comparative grammar and its usual methodology, that the one language in all the world most closely related to Japanese is Chinese. Any investigation of the modern Japanese vocabulary immediately turns up hundreds and hundreds of words which clearly are closely related to Chinese words—and they are more than mere look-alikes of the *kaF-u* : : *kaufen* variety. Even on close examination they reveal the same kind of regular correspondence in matters of detail which is, as we have seen, essential for any proof of genetic relationship. Modern Japanese has two different sets of words for the numerals; of these the most frequently used set can be immediately seen to be intimately connected with the Chinese numeral system: *ichi* "one" Chinese *i; ni* "two" *erh; san* "three" *san; shi* "four" *ssu; go* "five" *wu; roku* "six" *liu; shichi* "seven" *ch'i; hachi* "eight" *pa; kyū* "nine" *chiu; jū* "ten" *shih.* Not all these are now look-alikes, to be sure, but by and large the two sets clearly have a great deal to do with each other; and if we were to arrange the data in terms of Old Japanese and Middle Chinese we would find many closer resemblances—for example, *ni* "two" Middle Chinese *ńźi;* Old Japanese *Fati* "eight" Middle Chinese *pwat,* and so on.

Fortunately, our knowledge of the history of the Far East and in particular our knowledge of the many centuries of cultural contact between China and Japan save us from this otherwise fatal error. No one today seriously suggests that Chinese and Japanese are genetically related, in spite of this kind of evidence. We know that the Japanese have for most of their history been exceptionally avid students of Chinese language and culture, and that they have in the process borrowed into their language a great number of Chinese words, even including such supposedly basic vocabulary items as these numerals.

The great body of striking lexical resemblances between Chinese and Japanese is due, then, not to genetic relationship but to wholesale borrowing—a process which began with the introduction of the Chinese language and script to Japan and which still goes on today. This borrowing has all but replaced the original Japanese vocabulary for many items—including some that would ordinarily be considered basic items of vocabulary and hence relatively immune to borrowing—and it constitutes one of the most remarkable examples of wholesale linguistic borrowings in history. To understand how these borrowings took place, and why they show the same kind of regular correspondence in matters of detail which otherwise we would normally assign to close genetic relationship, it is necessary to consider some of the details of the complicated process by which the Chinese language, and with it this vast corpus of loanwords, reached Japan.

Chapter 3

Writing Systems

When Fukuzawa Yukichi wrote that in his study of English "the pronunciation was naturally the most difficult part of all," he was only documenting the most recent chapter in the long history of foreign language study by the Japanese; they had to begin, as we all do, with the pronunciation, and always for them the pronunciation was to prove "the most difficult part of all." As Chinese began to be studied and as knowledge of the Chinese script came to be more and more widespread in early Japan the problem was the same. The script itself was then and still remains a great nuisance and a bother, but in the seventh and eighth centuries, as in the eighteenth and nineteenth, "the pronunciation was naturally the most difficult part of all."

The earliest contact of the Japanese with Chinese script and language probably dates back as far as the third century of the Christian era, and by the end of the fourth and the beginning of the fifth century the two cultures were already in significant cultural communication with each other. The first teachers to introduce the Japanese to the mysteries of the Chinese language and its script were without doubt Koreans; it was a Korean who is recorded as having arrived in Japan in 513, for example, to serve as a "professor of the five [Confucian] classics" (*wu-ching po-shih*), some twenty-five years before one of the official dates for the introduction of Buddhism. By the beginning of the fifth century the Yamato court in the Kansai area had firmly established its suzerainty over Honshū. It was thus in a position to initiate the first of many Japanese adventures on the Asiatic mainland through the establishment of a series of military and administrative outposts in ancient South Korea. This could only have added to the numbers of Koreans going and coming between the peninsula and Japan. There is little doubt that at this early period qualified Chinese teachers from China itself were avidly sought after; but they were few and far between. Koreans were in far greater supply, and when Chinese could not be had they were eagerly pressed into service for their knowledge of the Chinese language and the Chinese script. The Koreans had begun their sinicization centuries earlier and were in a good position to serve as cultural and linguistic intermediaries between China and early Japan.

These Koreans and Chinese soon initiated the Japanese into the use of the Chinese script, not only to write Chinese but also Japanese. The Koreans had made several early experiments with various systems for writing their own language in Chinese characters, and it is clear that the first such attempts in Japan were partly based upon these early Korean systems.

Even with this help, these early attempts to employ the Chinese script for writing Japanese still involved numerous difficulties. One problem which complicates their study is the extent of the still largely undescribed role of the Korean intermediaries. Korean must necessarily have been the language through which many if not most of these new literate techniques first filtered through to the Japanese. It would, however, be a mistake to assume that every problem in the use of Chinese characters in writing Old Japanese words is to be ascribed to the difficulties encountered on both sides in working through Korean intermediaries.

There is also considerable evidence that by at least the end of the seventh century much of the work was being carried out directly under the guidance of Chinese. The *Nihon shoki*, for example, in an entry with a date corresponding with 691 in the Christian era, mentions two persons from the continent specifically identified as having come from T'ang China who were employed as *on hakase* (or as it may also be read, *koe no hakase*) "professors of pronunciation." The same passage lists and identifies as Koreans two other "professors of writing" (*te no hakase*), so that it appears that by this time the work of instruction in the phonological application of the Chinese script was out of the hands of the Korean intermediaries. One of these Chinese "professors of pronunciation" is named Hsü Shou-yen; his name, roughly "[he who] protects the words," is curiously reminiscent of that of Lu Fa-yen, "[he who] sets norms for the words," the author of the *Ch'ieh-yün*, the basic Middle Chinese phonological text of 601. T'ang phonologists seem occasionally to have had names which described the nature of their studies.

The same text notes the arrival of these two Chinese in Japan in 689, from which point on it records their stipends in rice and silver. What was their work? From the title *on hakase*, which was created for them in 691, it is safe to conjecture that they were employed for their knowledge of Chinese phonological science, especially necessary as the Japanese came to grips with the problems of writing their own language in the Chinese script.

The Japanese themselves never, so far as we know, made any attempt to develop a script of their own. In this they resemble most ancient peoples, since the art of writing was invented independently only a few times in human history; otherwise it has generally been freely borrowed by one culture from another. The system of writing which the Japanese borrowed from China was original with the Chinese people and indigenous to their culture. In many ways it suited the Chinese language admirably. It can best be described as a writing system based on morphemic rather than on phonemic or phonetic principles. This means that the unit for which the Chinese script provided individual graphic signs was the morpheme—units of the language like *shan* "mountain," *jen* "man," *kuo* "state"—and not the individual phonemes making up these morphemes, such as /sh/, /a/, /n/, /j/, /e/, and the like. (These Chinese citations and those below, unless otherwise qualified, are all in modern Pekingese, a far cry indeed from the original language for which the Chinese script was created, but the principles involved remain the same. The Chinese citations also fail to note the tone distinctions of Chinese, unless these are particularly relevant to the problem, which they almost never are.)

Languages generally make do with a fairly limited number of phonemes. Alphabetic or syllabic writing systems, which provide individual signs for each phoneme or for sequences of a few phonemes, consist of roughly the same limited number of signs or at most of some small total somewhat in excess of that number; examples are our own alphabet, the syllabaries on alphabetic principles in which most of the Indic languages have long been written, or the later Japanese *kana* syllabaries. With a morphemic writing system, however, which must provide individual graphic signs ("characters") for each significant form—one sign or character for *shan* "mountain," one for *jen* "man," one for *kuo* "state," and the like—the potential number of signs necessary to write even a short text in the language soars at once to formidable proportions. Of course in Chinese, as in many languages, a word often consists of morphemes in sequence, that is, of compounds, and in such a case the graphs for the individual morphemes themselves can be economically reused—so that *shan-jen* "hermit" could be written with the graph for *shan* followed by the graph for *jen*—but even so the burden imposed on the memory by such a script is potentially very great.

To a great extent this onerous potential has been realized throughout the history of the use of the Chinese script, both in its homeland and in the countries to which it has been exported. The Japanese are today the most notable example of a non-Chinese people borrowing this script for their own purposes, but the Vietnamese and the Koreans were also involved with it in the past. The former abandoned it entirely in the seventeenth century; since the conclusion of World War II the North Koreans have abandoned it completely but it is still used, in conjunction with an indigenous Korean alphabet on syllabic principles, in South Korea.

It is curious to note that the greatest pressures for adopting the Chinese script always seem to have been located to China's east rather than to her west. Her neighbors in the Far East generally found the Chinese script irresistible, but the countries of Central Asia, which came just as early into important cultural association with China, generally preferred alphabetic or semi-syllabic systems from India. The result is that in Central Asia, we find Chinese being written in phonetic writing systems derived from India—the Brāhmī, the Tibetan script, and the ḥPhags-pa writing system. None of these sporadic orthographic experiments in writing Chinese phonetically were long lived and none of them had any lasting result in Central Asia or anywhere else, but they do point up an interestingly different response to the same cultural stimulus which the early Japanese faced.

Everywhere the Chinese script has always proved to be a fairly pointless burden on the memory and a troublesome feature for the culture, no matter how often reforms or restrictions involving the number of characters or their forms have sought to mitigate the nuisance. There was, to be sure, one way in which the Chinese themselves tried, even in the early phases of the formation of the script, to alleviate this burden of numbers. This was the introduction of a phonetic feature into the structure of the written characters, operating alongside of and simultaneously with its basically morphemic structure. Suppose that character X was invented for ("to write") morpheme S. Having become the written sign for that morpheme, it was then, as it is often expressed, "pronounced (or read) as S." Suppose that the problem now arises of fashioning a character to write another morpheme S′, which has no semantic connection with morpheme S but whose phonetic shape is either identical with (homophonous) or similar to it (*shan* and *san*, for example, or *san* and *sen*, or *shan* in a certain tone and *shan* in another tone, and the like). This problem could be solved either by creating a new graphic sign Y, totally unrelated to X, thus increasing the character repertory by still another sign, or by using character X amplified with some further graphic feature which would distinguish it from X for S by indicating the general semantic category to which S′ belongs. Thus X plus this new semantic key or "determinant" *d* becomes in effect a new character X*d*, used as a writing for S′.

The important advantage of such a practice is that even in the new combination X*d* the sign X would still give some hint of the phonetic shape of the morpheme S′. Hence this resulting new writing for S′ would be less of a burden on the memory than would a wholly new character Y. Thus for (S′) *fang* "to spin cloth," the graph X used for (S) *fang* "square" could be written with the addition of a small graphic indicator (*d*) in the form of a graph itself associated with still another morpheme *ssu* "silk."

There were other ways in which the structure of the Chinese script and its application to the Chinese language were further complicated, but what has been said here gives sufficient background for understanding what happened to the script after its importation to Japan. In the past the Chinese script has sometimes been described in the West as though it consisted of individual "symbols" for "ideas" or "concepts" or even for "thoughts"; it is perhaps almost needless to add that this has never been so and that the writing of "ideas" (even if such a thing were possible) has played no part in the use of the Chinese script in Japan, nor did it ever in China.

Following in the more experienced steps of their Korean masters and aided by their Chinese teachers in phonological matters, the Japanese soon began to experiment with new and novel ways of writing their own language using the Chinese script. But this put them squarely up against several major problems. As we have seen, the Chinese script was and is a nuisance; but even so it was quite well adapted to writing Chinese. The Chinese language of the period, like all Chinese dialects today, had little or no inflection or changes in the shape of its forms. A word like *tsou* "run" was always *tsou*, whether its sense in the syntactic structure in which it was used was "run," "ran," "running," "will run," or any other variation. Nor were there morphological features in the Chinese language corresponding to such changes as we see in English "man" against "men," "man's," "men's," or the like. It made a certain amount of sense for a language of this type to be written in a script based on morphemic principles. The morphemes of the language were by and large unchanging units and hence were quite well suited to representation by a set of equally unchanging graphic units. But early Japanese, like Japanese today, was more like English in this respect than it was like Chinese. It had different inflected forms corresponding to the different English verb forms just cited, and many others besides; in addition, it had a host of grammatical categories and features totally unlike those of Chinese. It proved to be particularly difficult to equate these with elements in the Chinese script because they had no close parallels in the Chinese language.

We can best visualize some of the problems facing the scribes of early Japan if we try to write English in Chinese script. "The bear killed the man" is a perfectly good English sentence; how can we write it in Chinese characters (but still in the English language, not translated into Chinese, for that would be simple enough)? We are in trouble with the first word: Chinese has no morpheme corresponding to English "the," and hence the Chinese script has no character for it. This kind of problem faced the early Japanese scribes over and over. What were they to do with the Japanese grammatical particles *no*, *ga*, *o*, *wa*, *e*, *ni*, and the like, for which there were virtually no corresponding features in Chinese and hence no immediately apparent equivalents among the Chinese graphic signs?

If we pass over this initial "the" as a bad job, we can of course write "bear" with the Chinese character *hsiung*, the graphic sign for the Chinese word which means "bear"; but we must remember to pronounce it as English [bér] from now on, and not as *hsiung*! For "killed" we can write Chinese *sha* "kill," but how shall we indicate that it is now "kill*ed*" and not "kill" or "kill*ing*?" We can simply leave this for the reader to guess; or we can find some Chinese character that has something to do with past time and try to remember to read it (pronounce it) "-ed." Or we might look for some character associated with a morpheme which in Chinese is pronounced approximately like English "-ed" and then use this, totally without reference to its meaning in Chinese but simply for its sound.

Continuing in our text we hit another "the"; we can either leave this one to the imagination of the reader, as we did the first, or made bolder by our phonetic experimentation with "-ed," we can write it with some semantically irrelevant character which in Chinese is associated with a morpheme that happens to sound to us, or to our Korean or Chinese teacher (or to whoever is leading us through all these graphic mysteries), something like what he or we think the English "the" sounds like. This process of phonetic matching is bound to be a fairly rough one even if one or more of the parties concerned has some phonetic training. Many of the Chinese teachers in early Japan, as we have seen, certainly did have such training within the limits of their own cultural tradition; but the sounds of one language are not the sounds of any other language, and the similarities which we think we are able to discover at first are often, perhaps always, more apparent than real. We will look in vain for anything even close to the English *th-* sound as in "the" in most of the languages of the world, and if we must write it in Chinese we will have to settle for some other spirant, probably for an *s-*; and writing "-ed" as mentioned above would present even more formidable phonetic problems. Difficulties of exactly this sort plagued the early Japanese scribes. Finally, there remains "man," which presents no problem; we can write Chinese *jen* "man" and must simply remember to read it "man."

What has all this labor produced? Roughly, the following (transcribing the graphs as if they were Chinese, which from the time of our initial decision to write English they in fact no longer are): [. . . gap . . .] *hsiung sha+ed se jen,* which "writes," that is, is to be read as English "the [but only if we remember to fill this gap in from our memory of the text, or from our knowledge of the structure of the language] bear killed the man."

This exercise parallels some of the chief ways of manipulating the Chinese script which the early Japanese employed. Some had been invented in Korea for writing Korean, others were devised in Japan, and it is not easy at this point to distinguish the two layers of accomplishment. The first and in some ways the easiest way was exactly the same as writing English "bear" with the Chinese graph *hsiung* or "man" with *jen;* Old Japanese *Fitö* "man" was written with the graph for Chinese *jen,* which is "man" in Chinese; Old Japanese *yama* "mountain" was written with the graph for Chinese *shan,* which is "mountain" in Chinese. It is convenient to label this way of using the Chinese script for writing Japanese words with the Japanese philological term *kun;* the word *kun* is a Chinese loanword and means "meaning" or "(semantic) gloss."

The other important way in which the Chinese script had to be manipulated for writing Japanese was similar to the method used to write "the" or "-ed" in the English example above. For uniquely Japanese grammatical elements such as the verb and adjective inflections, and also for the grammatical particles, Chinese characters were sometimes located that represented Chinese morphemes with roughly comparable meanings in Chinese and these were then used as *kun* writings. More often others were chosen simply for the Middle Chinese pronunciation of their associated Chinese morpheme, which was thought to be similar to the pronunciation of the Japanese morpheme which had to be written.

Thus the Old Japanese grammatical particle *nö,* modern *no,* was often written with a Chinese character that was Middle Chinese *nậi,* modern *nai* "your," but only its sound and not its meaning in Chinese was of interest here (on the possible significance of such equations of Middle Chinese *-ậi* with Old Japanese *-ö,* modern *-o,* see below). The Old Japanese grammatical particle *Fa,* modern *wa* was written with a character which was Middle Chinese *puâ,* modern *po* "wave," and the like. This meant in effect the eventual development of a purely phonetic method for writing Japanese words in the Chinese script. It is convenient to refer both to this system and to the Chinese script elements used in this way by the Japanese term *man'yōgana;* they are so called after the early poetic collection the *Man'yōshū*, the classical instance of a text where this system of phonetic writing is found. The element *-gana* is a combining form with voiced initial of *kana* < *kanna* < *karina* "phonetic script" from *kari-* deverbal from *kar-u* "borrow" + *na* "name."

Since the *kana* had its origins in the Chinese script, and since the Chinese script was a system for writing morphemes rather than individual phonemes or sounds, it naturally followed that the *man'yōgana* eventually led to a syllabic script in which each graphic sign represented a syllable, generally consisting of a single consonant followed by a single vowel, rather than an alphabetic script in which the individual phoneme would have been the point of reference for the individual graphic sign. This development was a direct result of the Chinese origins of the *man'yōgana* and did not particularly reflect the structure of Japanese. Since Old Japanese consisted almost exclusively of consonant and vowel sequences the script worked well enough for it. If, for example, Old Japanese had instead had complicated consonant or vowel clusters, it is more than likely that other avenues would have been explored in the development of the *man'yōgana*. But with this reservation, it was the nature of the script which was borrowed, rather than the structure of the language to which it was now adapted, which determined the syllabic nature of Japanese orthography.

Once the *man'yōgana* or syllabic phonetic script principle had been established, there was nothing to prevent Old Japanese *yama* from being written in *man'yōgana* as well as in *kun*. The method of writing a given word in any particular instance would depend on scribal preference, the amount of empty space available for inscribing a given text, or other aesthetic factors, and there is ample evidence that the early Japanese scribes took considerable pleasure in the possibilities for elegant graphic variation which the script afforded them.

Another and perhaps uniquely Japanese way of using the Chinese script was a rebus system, somewhat like the familiar children's riddle where a picture of the human eye followed by a sketch of a lumberman's saw is to be read as "I saw. . . ." Once the Chinese character *t'ing* "garden" had been associated as a *kun* writing with the Japanese word *niwa* "garden," it could then also be used as a rebus writing for the combination of grammatical particles *ni wa* "in . . ." Once the Chinese character *shan* had been associated as a *kun* writing with the Old Japanese word *yama* "mountain," and once the Chinese character *chi* "footprint" had been similarly associated with the Old Japanese word *tö*, later *ato* "footprint, trace" they could be and were written one after the other, *shan* + *chi*, to represent Old Japanese *yamatö*. And if the scribes fancied an etymological association between Old Japanese *yamatö* and *yama* "mountain" (and no one is to say that such an association did not exist), such a writing would for this reason have been all the more appealing to them. Or it could be further varied with Chinese *pa* "eight," once the written sign for that morpheme had been associated with Old Japanese *ya* "eight," plus Chinese *chien* "interval" associated with Old Japanese *ma* "interval," as Chinese *pa* + *chien* + *chi* = *yamatö*. This type of rebus script the Japanese call *ateji* "[Chinese] characters aligned [in rebus fashion with the sound of their Japanese semantic equivalents]."

The term *ateji* now actually covers a wide variety of different kinds of rebus-like writings, but they all have in common the fact that they are based on fortuitous coincidences in sound or sense in unrelated morphemes between Chinese and Japanese or within Japanese itself. Hence they tend to be even more than a normal burden on the memory and the patience of the reader. Many of these rebus-writings as used in early texts are eloquent testimony to the enormous leisure enjoyed by the Japanese upper classes at the time. That tiny segment of the population that was at all concerned with reading and writing had in fact little if anything else to do with its time, and so quite naturally it delighted in any device that would make the process as time-consuming as possible.

Against this background, it is perhaps a little less surprising to find for example the verb *id-u* "come out, leave" written with the Chinese characters *shan shang fu yu shan* "on top of a mountain there is another mountain." The explanation linking this to *id-u* is that the graph for Chinese *ch'u* "come out, leave" is written by reduplicating the Chinese graph for *shan* "mountain"! This particular kind of puzzle soon fell into disuse, but a considerable number of other somewhat less obscure *ateji* writings remained standard in the orthography down to the end of World War II. The orthographic reforms adopted in modern Japan since 1945 have among other things generally aimed at removing *ateji* writings as far as it is now possible to identify them. By modern times, however, the problem had become so complex that as one commentator has said, "in a sense, there is no place to stop short of simply not using Chinese characters in writing Japanese at all, because in a sense any use of Chinese characters to write Japanese is simply another variety of *ateji*." The early Japanese, however, found this kind of writing intriguing and far more rewarding aesthetically than any simple one-to-one phonetic or semantic equivalency system. If we (and the modern Japanese) find it puzzling and annoyingly ambiguous—and it is both of these—we must remember that our present-day ideals of rationality and efficiency, and above all our aesthetic tastes, are not those of the ancient Japanese scribes. They and their culture were not interested in evolving an easy system, or one that could be written quickly or read simply and unambiguously. Such values and goals were totally absent from ancient Japanese society, and to criticize in such terms the script which it developed is to ignore fundamental differences between our world and seventh-century Japan.

As if these manipulations of the borrowed Chinese script were not enough, it was also common for the Japanese scribes to elect the other alternate from among those suggested above for writing English in Chinese, and simply leave out any written indication at all for a Japanese form or two, trusting to the reader's knowledge of the language to return the missing elements to their rightful places. An English reader would know, or could be trained, to supply a missing "the" before "bear" in the example above, since an English noun of this variety in this type of English sentence structure requires the definite article. In the same way the early Japanese scribes often neglected to give any overt written recognition at all to such features as the Old Japanese adjective marker *-ki*, since the reader, faced with a sequence like *naga . . . Faru* "long spring" written with the Chinese graphs *ch'ang ch'un* "id.," was expected automatically to complete this with the grammatically necessary *-ki* to read *naga+ki Faru*. Or he might write Old Japanese *aredö* "have (concessive)" with the Chinese graph *yu* "have," indicating here only the Old Japanese verb stem *ar-*, followed with a *man'yōgana* graph for the element *-dö*, leaving the reader to supply the *-e-* in *ar+e+dö*.

Finally, of course, when Chinese words as such came to be more or less naturalized as loanwords in Japanese nothing was more natural than to write these in the same Chinese characters with which they were written in Chinese itself. This resulted in still another way of using the Chinese script to write Japanese and another convention of Japanese orthography which has survived to the present day; in contrast to the *kun*-writings, this use of Chinese characters to write

Chinese loanwords in Japanese texts is today called *on,* "pronunciation."

It is important to note that certain Korean song texts written in Chinese characters, the main corpus of which may be dated between 579 and 879, show most of these orthographic devices utilizing the Chinese script to write an unrelated language, and that they exactly duplicate the *Man'yōshū* orthography in many of its details. Chinese characters are used in these texts as what in Japanese usage would be called *kun;* they are used as the equivalent of the purely phonetic *man'yōgana;* as rebus-writings based on their *kun*-values; and in conjunction with *kun*-type writings to indicate the inflected elements of Korean words. Thus, the Chinese graphs *ch'ü yin ch'un* (lit.) "pass + hidden + spring" are to be read as Korean *kan pom* "the spring which passed," with Chinese *yin* "hidden" used here phonetically for the *-n* of *kan,* and *ch'ü* and *ch'un* as semantic *kun*-writings. The last examples of Korean texts in this orthography have dates corresponding with the year 1120 in the Christian era.

This, then, was the elaborate foreign writing system with which the Japanese elected to burden themselves and which they now busied themselves with learning, both in order to read and write Chinese itself and to apply it in the above ways to writing their own totally different and unrelated language.

At every stage in the process of imposing this foreign script on their own language, as well as in the task of learning Chinese itself, the early Japanese, like Fukuzawa in his study of English centuries later, were squarely up against the problem of pronunciation. The *man'yōgana* uses Chinese characters for their sounds in Chinese; but for which sounds? What we call "Chinese" is actually a great family of tongues of at least the size and scope of the Romance languages. It contains within itself today related languages as different from one another as are French and Portuguese or Spanish and Italian, and this situation in early China was, if anything, even more complicated than it is today. To understand how the Chinese script came to serve the purposes of the Japanese scribes, and to understand the form and way in which Chinese loanwords came into Japanese, it is necessary first to learn something of the pronunciation of Chinese at the period and something of the different types of Chinese that were brought over from the continent to Japan one after the other.

Perhaps the most important single feature revealed by inspection of the Chinese characters used in the *man'yōgana* system is that their phonology is, as we might expect, not chronologically uniform, in the sense that it does not exclusively represent the Chinese pronunciation of any narrowly delimited time and place. The first encounters of the Japanese with Chinese culture were early enough to leave certain traces of Chinese pronunciations typical of the Three Kingdoms (220–265) period in the phonological system of the *man'yōgana*. By and large, however, the system of Chinese pronunciation underlying the early phonetic use of Chinese characters in Japan was that of the following Six Dynasties period of China, and based in its essential features on northern Chinese down to about the end of the sixth century. (The Chinese "Six Dynasties" is basically a cultural-historical term with somewhat vague chronological implications; roughly it refers to the period between the beginning of the fourth century and the mid- or late sixth century.) This variety of Chinese pronunciation was the one introduced to the Japanese by the majority of their early teachers, whether Korean or Chinese, and it was the imitation of this variety of pronunciation by Japanese students of the language which formed the basis for the earliest *man'yōgana* systems.

Like all students of a foreign language the Japanese found some sounds in the new language difficult and others simply impossible, and their resulting approximations or frequent downright failures at Chinese pronunciation were incorporated into the system along with their successes. Somewhat later this oldest level of Six Dynasties Chinese pronunciation as reproduced, approximated, and used in Japan by the Japanese was called *go'on*, "the Go [= Wu, in Chinese] pronunciation," a term which as we shall see has given rise to certain subsequent misconceptions.

The early Japanese historical text known as the *Kojiki* (*Records of Ancient Matters*) was completed in 712. In those portions of this work where Japanese words are written phonetically in Chinese script (otherwise the text itself is in Chinese, or what passed for Chinese in the court at Nara), the characters are meant to be read according to this Six Dynasties system known as the *go'on*. But by the time of the *Nihon shoki* (*The History of Japan*), the similar but somewhat more sophisticated historical text which was completed in 720, all such Chinese characters employed phonetically are intended to be read according to a new and different system, which subsequently became known as *kan'on*, "the Kan [= Han, in Chinese] pronunciation."

What had happened in China in the meantime explains the differences between the two systems. The Six Dynasties standard language as found, for example, in the basic Middle Chinese phonological text, the *Ch'ieh-yün* of 601 (for our purposes most conveniently available today in Karlgren's phonetic reconstruction, based on this text and its somewhat later recension as the *Kuang-yün*), had been superseded by a different variety of Chinese, the newly emergent standard language of the great T'ang metropolitan centers at Ch'ang-an and Lo-yang.

When Japanese students, officials, and Buddhist clergy began to go to China to study, they became increasingly aware of the existence of this new T'ang standard language. They began to apply it to the use of Chinese characters in writing Japanese words and even to their own pronunciation of the Chinese loanwords which had already entered Japanese in the older *go'on* pronunciations. The new *kan'on,* then, was the Chinese language of Ch'ang-an at the peak of the T'ang dynasty, as it reached Japan, *mutatis mutandis,* from the end of the seventh and into the eighth century.

Throughout their history the Japanese have generally been apt and avid students of foreign things, but one problem that has always plagued them has been the time lag which such borrowing across considerable distances entails, and the constant risk that what they have with difficulty learned abroad may already be out of fashion by the time they master it. Buddhist cults and dogmas were no sooner imported and on their way to being fairly well understood in Japan when it was found that they had already given way in their homeland of China to other varieties of religious belief. Victorian dress and domestic architecture had no sooner been mastered by Meiji Japan when it was found that they were no longer the rage in the West. Early Meiji educational missions to Europe and America rushed back with the news that Christianity had already been abandoned in the advanced countries of the West, barely in time to halt their countrymen from a headlong rush into the once strictly proscribed faith which some of them had until then thought a necessary part of their nation's belated modernization. So also with the pronunciation of Chinese in early Japan. No sooner had the scribes painfully mastered the principles of writing Japanese in Chinese characters according to the Six Dynasties *go'on,* when returning students and priests arrived from China full of talk of a new way, in their view now the only really correct way, to pronounce Chinese.

The situation produced a sharp confrontation. On one side there were the vested interests of the old *go'on,* on the other, society's fear of being left behind the rest of the world; but before long the new *kan'on* by and large won out except in the area of religious terminology. There are interesting historical notices of the struggle as late as 793, when the government still found it necessary to issue a decree refusing to admit to Buddhist orders postulates who were unable or unwilling to recite their Buddhist texts in the new pronunciation. Among the Buddhist clergy and faithful the struggle to retain the *go'on* was hardest fought and it was here that the introduction of the *kan'on* was least successful. The good pious souls who had been taught to trust in the future bliss of the *issai shujō* "all sentient beings" in *gokuraku* "paradise" and their salvation from *jigoku* "hell" through faith in the *jihi mugen* "compassion unlimited" of the Bodhisattva, and all this in *go'on,* could now hardly be expected almost overnight to shift both their faith and their pronunciation to the *issetsu shūsei, kyokugaku, chigyoku,* and *shihi bukan*—the *kan'on* equivalents of the terms above. It had been hard enough for the Japanese converts to Buddhism to learn what all this sort of thing was about in the first place, without now having to learn to say it all differently. By the eighth century many Buddhist terms had already won a firm place in the language quite apart from religious belief or sect. For most of them *go'on* continued to be used and is still used today, and the inroads of the *kan'on* pronunciation into this sphere of the vocabulary were small.

Another area of vocabulary in which there was formidable resistance to the introduction of what seemed to many only a new-fangled Ch'ang-an fad in pronunciation was a small group of Old Chinese loanwords in Japanese. By the beginning of the eighth century this group of words had been so completely assimilated into the language that to most Japanese they were no different from any other part of the Japanese vocabulary. The old loanword *niku* "meat" remained *niku* and did not become what in *kan'on* would have been *jiku; netsu* "fever" remained *netsu* and did not change to *zetsu; tenjō* "ceiling" was not replaced by *tensei,* nor *byōbu* "folding screen" by *heifū,* nor *goma* "sesame" by *koba.* Words such as these were so well naturalized early in the history of Japanese that they were later spoken of as *wa'on* "Japanese pronunciations," in contrast to both the *go'on* and the *kan'on;* essentially they are simply an old level of *go'on.* (There was a still earlier and older layer of Chinese loanwords in Japanese, represented by such items as *uma* "horse," *ume* "plum," *zeni* "money," and the like. These were considered simply Japanese vocabulary items until recent philological studies clarified their exact history. At any rate, they too naturally remained unaffected by the *go'on* versus *kan'on* struggle.)

The new *kan'on* was most successful in getting itself accepted in the area of Confucian learning and other secular or at least non-Buddhist Chinese studies. As the Japanese became better acquainted with these other facets of Chinese culture, the resulting loanwords and other applications of Chinese script in Japan generally utilized the *kan'on* to the total exclusion of *go'on*.

Had these two systems of Chinese pronunciation *à la japonaise* differed from each other only minimally, the net result of this period of struggle between the two and the continued coexistence of both on various levels of the Japanese vocabulary would have been only of minor philological interest to later generations of Japanese. Unfortunately, such was not the case. The differences between the Chinese of the Six Dynasties and the Chinese of Ch'ang-an in the T'ang were roughly the same as the later differences between Dutch and English that were to bemuse Fukuzawa Yukichi and his contemporaries. The Chinese initials that the *go'on* had represented with Old Japanese initial *m-* and *n-* were now represented with *kan'on* initial *b-* and *d-*, with *j-* < *z-* < *d-* before *-i* and *-e*, so that *me* "horse" (*go'on*) became *ba* (*kan'on*), *nan* "man" became *dan*, and *ni* "two" became *ji* < *zi* < *di*. But these changes affected only the initials in certain types of syllables in Chinese, and when the syllable ended in Chinese *-ng*, which itself became Old Japanese *-ũ* or *-ĩ* (the first with syllabic nuclei which later became Japanese *-a-*, *-o-*, *-u-*, the second with *-i-* and *-e-*), these *go'on* initials remained unchanged in *kan'on* though the vowel or vowels following were usually quite different.

In another important set of changes, the voiced Chinese initials which the *go'on* had represented quite faithfully with Old Japanese voiced initials were all to be represented in the new *kan'on* with unvoiced initials, thus keeping pace with developments in Chinese but also thus falling together with the Old Japanese unvoiced initials for the Chinese unvoiced initials. Thus, the *go'on* had kept Chinese *g-* and *γ-* apart from Chinese *k-* and represented the first two as Old Japanese *g-*, the second as Old Japanese *k-*; but in the *kan'on* all three were simply to become *k-*.

In the dentals and various dental affricates the situation was even more striking. Old Japanese in the *go'on* had already thrown together a great number of different Chinese initials under Old Japanese *z*-, including Chinese d^{z}-, *z*-, $d^{\underset{.}{z}}$-, $d^{\acute{z}}$-, and *ź*-, but now these were all to be further thrown together in the *kan'on* with the representations of their voiceless Chinese equivalents under Japanese *s*-! Chinese *b*- had been represented by *go'on* as *b*-, but in the *kan'on* it was to become Old Japanese *F*-.

In the vowels and in the finals apart from the initials themselves the changes were equally striking but more difficult to summarize in brief. Two varieties of Chinese [a], both of which had been represented in the *go'on* by *-e*, were to give *-a* in *kan'on*, resulting in sets such as *ke* "house" (*go'on*) against *ka* (*kan'on*), *ke* "understand" against *kai*, *ken* "interval" against *kan; ken* "supervise" against *kan*, and *seti* "murder" against *satu*.

Little wonder, then, that the end result of this contention between the old and new fashions in Chinese pronunciation in eighth-century Japan has been confusion and contradiction. Even the dictionary makers have not been able to keep the two systems completely sorted out, and some of the readings for Chinese characters which are identified in modern Japanese dictionaries as being *go'on* or *kan'on* are simply linguistic ghosts generated on the basis of readings for other characters, and so on in a vicious circle. The rule according to which syllables in Chinese final *-ng* retained their original *m*- and *n*- initials in *kan'on* as well as in *go'on* has been the most perplexing part of the changes, especially for the lexicographers, who have at times invented ghost readings in their attempts to introduce what they think is order into the system. Thus even such a respected lexicographical source as Ueda Kazutoshi's *Daijiten* gives the following set of pronunciations for a set of words in original Chinese *-ng:*

Modern Chinese		Ueda's kan'on	Ueda's go'on	Ueda's "idiomatic pronunciation" (kan'yō'on)
ming	"bright"	*bei*	*myō* < *myau*	*mei*
nung	"agriculture"	*dō* < *dou*	*nu*	*nō* < *nou*
ning	"peaceful"	*dei*	*nyō* < *nyau*	*nei*

Here what Ueda gives as the "idiomatic pronunciation" is in reality the genuine *kan'on*, with original initial *m*- and *n*- preserved because these syllables ended in Chinese final *-ng*, while his so-called *kan'on* readings *bei*, *dō*, and *dei* are lexicographical ghosts constructed in an attempt to make this set conform to the *kan'on* developments in other syllables not ending in original *-ng*.

As might have been predicted, a natural result of all this has been that in the language as well as in the dictionaries the two systems of Chinese pronunciation have not always been kept separated in neat compartments. Many common Chinese loanwords in Japanese today are old blends of the two systems. To take as examples a few common words from the modern language and identifying historical *kan'on* pronunciations with SMALL CAPITALS and *go'on* with italics, we find KA*nai* "my wife," GAI*mai* "imported rice," BA*niku* "horse meat," and *mai*BOTSU "burial." Even the modern name of the old imperial capital and cultural center in the Kansai area, Kyoto, is a blend of *go'on* and *kan'on* in this same curius fashion, for Kyō- is *go'on* and -to is *kan'on;* if it were entirely in *kan'on* the name of the city would be *Keito, if entirely in *go'on* it would be *Kyōtsu.

The introduction of the *kan'on* into Japan is often attributed to a single individual, a Chinese named Yüan Chin-ch'ing (Japanese: En Shinkei), who arrived in Japan in 735 in the company of a Japanese nobleman returning from study in China. Yüan was only a young man of eighteen or nineteen at the time, but he was much sought after in Japan for his mastery of the fashionable Ch'ang-an pronunciation of Chinese and for his proficiency in reading difficult classical Chinese texts. Under his naturalized Japanese name of Kiyomura Sukune, which he took in 778, he and his activities are well attested in the literary sources of the period. It was said of him that he was equally proficient in the pronunciations of both Ch'ang-an and Lo-yang, and most importantly, that he was able to point out to the Japanese and correct their "corrupt pronunciations" deriving from other portions of China and from earlier periods. He was one of the *on hakase,* and he no doubt played an important role in the study of Chinese in Japan in the second half of the eighth century.

Under these circumstances it is not difficult to see how Yüan became associated with the introduction of the new *kan'on,* and how eventually its introduction to Japan was attributed to him as a discrete historical event, which it surely was not. The introduction of the new *kan'on* system was an inevitable and natural result of Japanese visits to T'ang China, and it is naïve to attribute it to any single individual. Such figures as the priest Dōshō, who arrived in China in 654 and studied in Ch'ang-an with the great Buddhist translator Hsüan-tsang (600–664), were by no means uncommon. On their return to Japan they could hardly have been expected not to give further currency to the language which they had learned from such masters at the fountainhead of Chinese culture.

The terms *go'on* and *kan'on* themselves have in the past given rise to a certain amount of misunderstanding. The morpheme *go* [= Chinese Wu] seems to suggest either the southern area of China, linguistically the region of what in modern times have been called the Wu dialects, or the Wu state at the time of the Three Kingdoms. The morpheme *kan* [= Chinese Han] is the basic ethnic designation for the Chinese race as distinguished from the non-Chinese cultures surrounding it, though it ultimately derives from the name of the dynasty which in two great installments ruled China from roughly the second century B.C. through the second century of the Christian era. But as these elements are used in the terms *go'on* and *kan'on* it is now clear that *go* = Wu is to be understood not in any specific geographical or chronological sense, but rather in its specialized and pejorative T'ang philological sense of "non-standard" in regard to language. The term *go'on* was one which the Japanese learned in T'ang China, where it was devised to indicate their own old (and odd) "non-standard" pronunciation of Chinese, in contrast with the term *kan'on* which was similarly made up to mean "Chinese (i.e., standard, proper) pronunciation." This is shown clearly by several kinds of evidence, among the most striking of which is a text dated in correspondence with 880 by a Japanese Buddhist monk who says of the *go'on* that it is "close to the *wa'on*," that is, the old naturalized layer of Chinese loanwords in the Japanese vocabulary, but that the *kan'on* is what he calls *sei'on*, Chinese *cheng yin*, "correct pronunciation."

Even after the competition between *go'on* and *kan'on* had been more or less resolved, still other developments in Chinese pronunciation were introduced to Japan, and these also have left their traces in the Chinese loanword vocabulary. These later pronunciations are known in Japan as *tōsō'on* "T'ang and Sung pronunciations," and are largely based on the language of the Hangchow area during the fourteenth century. They are especially well represented in a segment of the Japanese vocabulary consisting largely of words borrowed from the vocabulary of the later Chinese Buddhist schools, particularly the Zen sect, and were brought back to Japan mostly by members of the Buddhist clergy who had studied in China.

These men usually came and went through the Chinese ports of Hangchow in Chekiang and Ch'üan-chou in Fukien. By the fourteenth century the general standard language of north China had lost its voiced initials, but at this time they still persisted in the language of Chekiang and Fukien. Except for this peculiarity, the *tōsō'on* pronunciations agree well with standard northern Chinese of the period. They are chiefly distinguished from the language of the *kan'on* by the following:

(1) Middle Chinese final *-p*, *-t*, and *-k*, which had individual representations in both the *go'on* and the *kan'on*, had by now in most of the Chinese dialects all shifted to a final glottal stop. This the *tōsō'on* represented in general with a final *-t*. This is to be seen, for example, in the morpheme for "bamboo," where the *kan'on* had *chiku* < *tiku* while the *tōsō'on* has *shitsu* < *situ*, or in that for "stone," where the *kan'on* had *seki* and the *tōsō'on* has *shitsu* < *situ;* both these forms go back to Middle Chinese final *-k*. But this Japanese final *-tsu* < *-tu* is not to be taken here as a literal representation of a Chinese final *-t*, which by this time no longer existed even in those words which had once had it. There had been important changes in Japanese phonology itself by this time; the Japanese geminate consonants had developed, and *-tsu* < *-tu* in such a case is only an orthographic indication of the gemination of the following consonant. Thus, with the morphemes cited above in composition, the *tōsō'on* has *shippei* < *shitsupei* < *situpei*, "bamboo staff" (with which the Zen master awakens the student who dozes off), and *shikkui* < *shitsukui* < *situkui*, "mortar, stucco."

(2) The *kan'on* vowel *-a*(-) is generally represented by the *tōsō'on* as *-o*(-), following changes in the Chinese pronunciation of the period. From this follows the most common term in Japanese for a Buddhist clergyman, *oshō*, the initial morpheme of which would have been represented in the *kan'on* as *ka* < *kwa*, or in the *go'on* as *wa*. The word on which this and several other Japanese versions of the same lexical item are based was not originally Chinese, but was a Chinese transcription of a Central Asian Prakrit version of a Buddhist Hybrid Sanskrit original.

(3) Chinese *-i-* of the period shifted to become *-ɯ-* following Chinese t^s- and *s*-; this was reflected in the *tōsō'on* by *su* "child, master" against the *kan'on* representation of the same original morpheme as *shi* < *si*.

(4) In a sweeping series of changes various Chinese retroflex and dental affricates and sibilant initials had shifted to fall together as an unvoiced affricate of the type $t^{š}$-; all of the initials of this group were now uniformly represented in the *tōsō'on* under initial *s*-; thus

kan'on morphemes of the type *chi* < *ti* and *shi* < *si*, which had kept apart earlier Chinese distinctions, now fell together in the *tōsō'on* as *shi* < *si*.

(5) The earlier regular treatment of final Chinese *-ng* as *-ũ* or *-ĩ*, common to both the *go'on* and *kan'on*, was now totally lost sight of, and morphemes in Chinese final *-ng* uniformly appear in the *tōsō'on* with final Japanese syllabic nasal *-n*, a phoneme which had not been available in Japanese phonology at the time of the earliest introduction of the *go'on* and *kan'on*. With this development, original Chinese *-ng* now fell together with earlier Japanese representations of original Chinese *-n* and *-m* as final syllabic *-n*. Examples, all from original Chinese *-ng*, include "sūtra, classic": (*kan'on*) *kei* < *keĩ* : : (*tōsō'on*) *kin;* "bottle, vase": *hei* < *Feĩ* : : *bin;* "go, walk": *kō* < *kau* < *kaũ* : : *an*. Some students have guessed that this different treatment for original Chinese final *-ng* indicates a pronunciation for this phoneme in the Chinese of the Hangchow area in the fourteenth century strikingly different from that in the Chinese of Ch'ang-an in the middle of the T'ang dynasty; at any rate, the Japanese borrowings certainly give very different treatments to the two.

Phonologically, the Chinese language which underlies the *tōsō'on* readings is a proximate ancestor of modern Pekingese. Thus in a certain sense the Japanese vocabulary has historically extended its scope to include specimens of Chinese phonology reaching from the time of the Six Dynasties down to the early modern period, a remarkable tribute to the continuity and consistency of Japan's long history of deep involvement in China.

Some of the chief developments in the phonology of the Chinese loanwords which have been sketched above can be conveniently reviewed in Tables 1 and 2. These tables also show some of the differentiation by semantic categories which the different levels of Chinese phonology as domiciled in Japan now represent.

The most striking omission from all the Chinese phonological systems borrowed into Japan, *kan'on*, *go'on*, and *tōsō'on* alike, is that of the Chinese system of distinctive tone contrasts. The languages on which the *go'on* and *kan'on* were based had in common the fact that in addition to its segmental phonemes each morpheme had a distinctive pitch or tone, of which there were generally four, and one or more of these probably in two registers. To some extent the occurrence of these tones was governed by the phonetic nature of the syllable initials or finals and sometimes by other factors as well, and these correla-

TABLE 1

Japanese Developments of Some Typical Chinese Morphemes

Modern Chinese	*hsing, hang* “go; handle”	*ch'ing* “ask”	*nuan* “warm”	*t'ou* “head”	*tzu* “child; nominal suffix”
Middle Chinese	*gɒng, γâng*	*ts'i̯äng*	*nuân*	*d'ə̯u*	*tsi*
Go'on	*gyō<gyaũ*	*shō<syaũ*	*nan*	*zu<dᶻu*	*shi<si*
Kan'on	*kō<kaũ*	*sei<seĩ*	*dan*	*tō<tau*	*shi<si*
Tōsō'on	*an* (as in): *andon* “portable lantern”	*shin*: *fushin* “addition to a building”	*non*: *nonki* “carefree”	*jū*: *manjū* “dumpling”	*su*: *isu* “chair”

TABLE 2

Some Examples of Semantic Specialization of Go'on and Kan'on Readings for Chinese Morphemes in Loanwords in Japanese

Modern Chinese	*ching* “Confucian or Buddhist text”	*wen* “written graph; decoration”	*chin* “metal; gold”	*chin* “now”	*chien* “interval”
Middle Chinese	*kieng*	*mi̯uən*	*ki̯əm*	*ki̯əm*	*kăn*
Go'on	*kyōmon* “Buddhist text” (<*kyoũ-*)	*monjo* “document” (<*-zyo*)	*konjiki* “golden color” (<*-ziki*)	*konjaku* “a long time ago” (<*-zyaku*)	*seken* “the world; life”
Kan'on	*keisho* “Confucian classic”	*bunshō* “prose composition; sentence” (<*-syaũ*)	*kingin* “gold and silver; money”	*kinko* “now and earlier”	*chūkan* “the middle” (<*tyuũ-*)
Modern Chinese	*cheng* “true”	*ch'eng* “accomplish”	*sheng* “life”	*ming* “light”	*chi* “term”
Middle Chinese	*tś'i̯äng*	*ź̯i̯äng*	*ṣɒng*	*mi̯wɒng*	*kji, g'ji*
Go'on	*shōtai* “true shape, nature” (<*syaũ-*)	*jōju* “accomplishment, consummation” (<*zyaũzyu*)	*sesshō* “(the crime of) taking life” (<*setusyaũ*)	*tōmyō* “taper burnt as votive offering” (<*toũmyaũ*)	*matsugo* “hour of death”
Kan'on	*seihō* “(four) square” (<*seihaũ*)	*seikō* “success” (<*seikoũ*)	*seisatsu* “life and death” (<*seĩsatu*)	*meihaku* “evident” (<*meĩ-*)	*kikan* “interval of time”

tions were generally different in different dialects at different times in the history of the Chinese language. But apart from this, all the varieties of Chinese upon which the various Japanese borrowings were based were languages in which tone was a distinctive feature. Despite this fact the Japanese loans seem almost entirely to have ignored it.

This has meant above everything else that the sheer number of homophones generated in the Chinese loanword layers of the Japanese vocabulary was and is tremendous. Even if tens of different Chinese morphemes with different initials in Chinese fell together under Japanese initial *s-*, for example, it would still have reduced the resulting homophone count by at least a quarter if the four distinctive tones among which these morphemes were originally distributed in Chinese had been preserved or imitated in some consistent fashion. Japanese students were familiar with the tone distinctions of Chinese on paper, at least, and even evolved systems for indicating them graphically when, for example, it was necessary to take them into account in writing Chinese poetry, where they play a role in determining which rhymes are or are not allowable. But as a significant linguistic feature they do not appear to have survived the borrowing process into Japanese.

Chinese is about as different from Japanese as any language can be, both in phonological system, grammatical categories, and syntactic structures. As the early Japanese began to study it in earnest they were struck forcibly with all these differences, and set about to take them in hand; the way in which this was done provides a fascinating commentary on human ingenuity and a valuable glimpse into the structures of both the languages. It is as if two totally different systems of wave motion were suddenly to intersect; at their violently agitated collision point we can gain a cross-section view in which the conflicting patterns of each give perspective to the other.

During most of their early study of Chinese the Japanese were most concerned with learning to read and write it, and hence most of their effort went into two different channels. One was concerned with learning to pronounce Chinese (we have just seen above to what effect); the other was learning to gloss it for sense in Japanese, and thus eventually to be able to produce what were in effect both explanations and running translations of a given text. Since many of the traditions which were set up in this process were well entrenched before much Japanese literature had been set down in writing of any sort, the Chinese-reading tradition provided a model for imitation by

Japanese works without Chinese originals and ultimately a constant source of enrichment for the Japanese language itself.

At the same time, the striking structural differences between Chinese and Japanese meant that many of the devices which were slowly evolved for reading Chinese as if it were Japanese produced structures and constructions which were not really Japanese, in the sense that they consisted of patterns that would never have occurred without the outside stimulus of their Chinese models. The net result was a circular process of borrowing and mutual enrichment which is perhaps unique in linguistic history. When the Japanese began to insert Japanese syntactic and other linguistic features into the Chinese works which they composed, the wheel of borrowing and mutual enrichment had come full turn; but unfortunately "borrowings" of this sort (imitations of Japanese grammar in Chinese compositions), unlike those in the other direction (imitations of Chinese grammar in Japanese compositions), were aesthetically unpleasing in terms of the values of the culture and then as now counted simply as "mistakes."

Of course no two languages, even two languages as different from each other as are Chinese and Japanese, can be compared in over-all terms without turning up some superficial resemblances. Chinese *lei sheng* "the thunder sounds" (*lei* "thunder," *sheng* "cries") can be rendered word for word in Japanese as *kaminari ga naru,* with *kaminari* for *lei* and *nar-u* for *sheng,* and the grammatical particle *ga* added to make a complete syntactic structure in modern Japanese. Chinese *lao jen* "old person" (*lao* "old," *jen* "person") can similarly be rendered as *oita hito* "the person [who] is, has become old," with *oita,* a plain perfect verb form from *ou* < *oy-u* "grow old" and *hito* "person." Here the Japanese structure actually is a significantly different one, but a gloss is possible with roughly comparable elements in a superficially comparable order.

However, any excursion in texts beyond certain well-defined limits soon turns up Chinese structures that will by no means yield to this word-for-word glossing in the same order. Chinese *ch'eng ma* "ride a horse" (*ch'eng* "ride," *ma* "horse") equals Japanese *uma ni noru,* with *uma* "horse," *ni* "on (grammatical particle)," *nor-u* "ride." Chinese *mai ming* "sell a name" (*mai* "sell," *ming* "name") is Japanese *na o uru,* with *na* "name," *o* (direct object particle), *ur-u* "sell." Chinese *ch'iu jen* "seek a person" (*ch'iu* "seek," *jen* "person") is *hito o motomeru,* with *motome-ru* "seek."

In other words, the kind of syntactic structure which can be described in roughest terms as verb-object predication has one word order in Chinese, and another, its exact opposite, in Japanese. So also for negatives and an entire set of other Chinese verbal qualifiers. These all came to be handled by a variety of techniques, as the Japanese gained greater familiarity with the nuances of literary Chinese and its great repertory of grammatical categories. Chinese *pu* "not," *wei* "not yet," *k'o* "should" and other members of this set all precede the unchanging verb to which they refer in Chinese, but in Japanese their equivalents follow it as an inflection of the verb itself. Thus *pu-cheng* "not correct" was rendered *tadashikarazu,* a negative from *tadashi-i* "correct," or other further inflections of this negative form, and *pu yü* "does not tell" became *katarazu,* a negative from *katar-u* "tell," while *fei jen* "is not a man" became *hito ni arazu,* with a negative from *ar-u* "be, is."

For *wei chih* "not yet know" and similar Chinese constructions the Japanese were forced to take refuge in the most elaborate grammatical devices. Most of these involved a discontinuous set of syntactic features by means of which one Chinese morpheme became in a sense "responsible" for two or more Japanese elements separated from each other by the demands of Japanese grammatical structure; thus, for *wei chih* the Japanese came to use the conventional gloss *imada* (= modern *mada*) "yet" plus *shirazu* "does not know" (a negative from *shir-u* "know") with the entire discontinuous set *imada . . . -zu* corresponding to Chinese *wei.* So also for the common Chinese expression *pu-kan* "(one) does not dare to . . . ," which was rendered with the discontinuous *aete* (< *ahete*) . . . *sezu* (< *su-ru* "do"). In the same way Chinese *k'o hsing* = *iku beshi* "may, can go," *tang hsing* = *masa ni yukubeshi* "should go" (with the discontinuous set *masa ni* . . . ["truly"] . . . *beshi* ["should"] for Chinese *tang*), and *hsü hsing* = *subekaraku yukubeshi* "must go," with an even more elaborate discontinuous set, *subekaraku* (< *subeku* + *aruraku*) . . . *-beshi.*

In a great variety of other constructions also, Chinese word order required extensive juggling back and forth to make these word-for-word glosses come out as intelligible Japanese: *shih lu* = *ro ni yuku* "go to Lu," *wei li* = *ri to naru* "become an official," *fu shih* = *shi o fu su* "compose a poem," *yu te* = *toku ari* "have virtue," *wu tao* = *michi nashi* "not have the Way." In each of these the Chinese word order is exactly a mirror image of the Japanese.

This type of inversion has generated at least one Japanese word by a curious process of word-formation through translation-imitation; *hitotonari* "a person's character" originates in the gloss, in necessary Japanese word order and grammar, which goes with Chinese *wei jen* "id." (*wei* "becomes, makes," *jen* "person") in which *wei* is treated as Japanese *nari* (*nar-u* "become") with the grammatically necessary Japanese particle *to* preceding it.

Passives and other more complex Chinese syntactic structures called for progressively more complex systems for rendering them into Japanese. Chinese *wei jen suo ma* "become someone who is abused by others, i.e. be abused" (*wei* "become," *jen* "person," *suo* [relative construction marker], *ma* "abuse") becomes Japanese *hito* (= *jen*) *no nonoshiru* (= *ma*) *tokoro* (= *suo*) *to naru*. Here the Chinese relative morpheme *suo* is written in Chinese with a character which in Japanese was also associated (as a *kun*) with the Old Japanese word *tökörö* "place," while the morpheme *suo*, which goes with this graph in Chinese, under certain circumstances also means "place." What happened in this case as the Japanese gained more and more familiarity with Chinese was that Old Japanese *tökörö* was soon extended in its usage and semantic range to cover the same kind of relative construction as that in which Chinese *suo* was commonly used. This construction was not original in Japanese. In Japanese of all periods the simple conjunction of a verbal element (in an attributive inflected form, at certain stages of the language) with a nominal one following produces a relative construction, thus *naru hito* "the person [who] becomes," *kaku hito* "the person [who] writes," *shiroi hito* "the person [who] is white." The introduction, by loan-translation, of this new extended sense of *tökörö* as a relative construction marker in imitation of the use of *suo* = *tökörö* in classical Chinese produced such constructions as *naru tokoro no hito*, *kaku tokoro no hito*, etc., identical in meaning with the same Japanese constructions without *tokoro no*.

The extent to which it was necessary to twist and bend Japanese syntax in order to give adequate representation to the structures of classical Chinese was often of extraordinary proportions. Chinese *pu k'o pu chih yeh* "must know" (cf. *Lun yü* 4.21) becomes *shirazaru bekarazaru nari*, according to a regular pattern for rendering Chinese structures of this variety. For an even more impressive example of what this type of glossing could lead to, the following passage (*Lun yü* 3.24) may be quoted without further comment: Chinese *wu* *wei ts'eng pu te chieh yeh* "I have never been denied the privilege of seeing them" = Japanese *ware imada katte* (< *katute*) *mamiyuru o ezunba arazu.*

It is not too difficult to reconstruct the way in which these traditions for reading Chinese as if it were Japanese grew up in early Japan. The opening line of the *Lun yü*, for example, in modern Pekingese *hsüeh erh shih hsi chih pu i yüeh hu,* would first certainly have been read and memorized in *go'on* or *kan'on,* coming out, in the former, as *gaku ni ji* (< *zi*) *jū* (< *ziFu*) *shi* (< *si*) *fu* (< *Fu*) *yaku echi* (< *eti*) *go.* With this out of the way, the student would then work through each element in order, and come up with the following set of equivalences: *hsüeh,* i.e. *gaku* = *manabite* "study and," an old gerund from *manab-u* "study." Next, *erh* = *ni;* in Chinese this is a verbal continuation marker, but the Japanese student would soon begin to associate this with the Japanese gerund ending *-te* of the previous *manabite.* Hence he would either consider it equivalent to this *-te,* or he would consider that it was here "not to be read in Japanese"; in either case, the results would be the same. This association of Chinese *erh* with the Japanese gerund also helps to account for the somewhat overliberal use of *erh* which is noticeable in many Chinese texts written in Japan. A good example is the following passage from the *Kojiki* (I.18): *lao fu yü lo nü erh jen tsai erh t'ung nü chih chung erh ch'i* = *okina to omina futari arite* (= *tsai erh*), *musume o* (< *wo*) *naka ni okite nakeri,* "an old man and an old woman, two of them, had a young girl between them and were weeping." This example also shows another of the things that tended to go wrong with some of the Chinese written in early Japan; here the position of *t'ung nü* = *musume* "young girl" preceding *chih* = *okite* "place" is incorrect Chinese syntax, which must have happened here because of careless carrying-over of the Japanese syntactic order of object-verb into the Chinese text.

To return to the *Lun yü* passage, next comes *shih* = *toki* "time," which would be explained in such a fashion that the Japanese student would realize that to make any sense at all it must at the very least here be amplified with the Japanese grammatical particle *ni* "in . . ." and hence be read *toki ni* "at times, at a time." But this too must, as far as the meaning of the passage is concerned, be held in abeyance for a moment until the problems of the next two Chinese morphemes are solved. They are *hsi chih* "study this," which at once introduced the basic problem of a significantly different word order between Chinese and Japanese. The rendering was, of course, *kore* (= *chih*) *o*

(< *wo*) *narau* (< *naraF-u*) (= *hsi*), the exact opposite of the Chinese order. Taken together with the two previous elements as *toki ni kore o narau,* it could now be understood, if still with some difficulty, along the lines which the commentators indicate for the text itself (which is not a particularly easy one), that is, to mean "learn with a constant perseverance and application."

The element following was a negative, Chinese *pu,* and even the most elementary Japanese student of Chinese had already learned that to encounter this in a text meant danger ahead. Here he had to be trained first to postpone and then to transpose it to serve as the negative inflected final of the Japanese equivalent of Chinese *yüeh* = *yorokobashi-i* "pleasant," which then became *yorokobashikarazu* "is not pleasant." The next element, Chinese *i,* corresponded as a simple *kun* quite neatly to Japanese *mata* "still, again, moreover," and raised no problems of word order or meaning, apart from its interpolation here between the negative *pu* and the verb *yüeh.*

Finally, the Chinese sentence ended in *hu,* which was easily glossed here by the Japanese literary interrogative *ya,* making the entire statement a rhetorical question: *manabite toki ni kore o narau, mata yorokobashikarazu ya,* "is it not pleasant to learn with a constant perseverance and application?" The student also had to learn that in other instances Chinese questions would often carry no overt indication of their structure in the form of a final particle such as Chinese *hu,* and that in these cases it would be necessary for him to supply the necessary Japanese equivalent from his knowledge of the two languages.

In this way the tradition of reading classical Chinese texts as if they were Japanese (*kanbun*) was gradully built up in Japan, through a process of growth and development that continued for centuries. Soon the *gaku ni ji jū shi fu yaku echi go* was totally lost sight of in favor of the *manabite toki ni* . . . etc., except for certain specialized purposes, as for example the reading aloud or chanting of Buddhist scriptures for ritual purposes where continuous reading in *go'on* is still the accepted practice. Today reading Chinese texts entirely in *go'on, kan'on,* or a combination of the two, without changing the word order or inserting Japanese glosses, is called *bōyomi* "reading [in a straight line like a] stick" (*yomi-,* deverbal from *yom-u* "read aloud"; cf. *yob-u* "call aloud"), a reference to the shifts in word order necessary to read these texts in Japanese (*manabite toki ni,* etc.), which is called *kundoku* "reading for meaning."

The *kundoku* tradition as we find it today is the result not only of a long process of growth and development but also of judicious pruning and selection, especially in the last years of the Tokugawa period and in a series of school texts officially set by the Meiji government in 1905. During most of Japanese history the exact way in which *kundoku* was performed was a matter of school affiliation, with many conflicting and contradictory traditions. One source of such differences was the possibility of different Japanese words (*kun*) being associated with the same Chinese graph, depending on its use in a particular sense in any given passage; and in many instances the *kundoku* tradition as we have it today has overlooked what were once common *kun* in favor of others. Thus in the present *kundoku* tradition Chinese *che* "person" is regularly read with Japanese *mono* "id.," but in *kundoku* texts dated 828 and 909, for example, it is regularly glossed with Japanese *hito* "id." Chinese *ssu* "resemble" is today regularly equivalent to Japanese *ni-ru* "id.," but in a *kundoku* text dated 872 it is rendered as . . . *ga gotoshi* "is like . . . " In many cases it is clear that the renderings of the surviving *kundoku* tradition are more stereotyped and wooden than some of those common in past stages of the tradition; thus for Chinese *ming wei Y* "[X] was named *Y*" the modern *kundoku* tradition always has *na o* (< *wo*) *Y to nasu*, but a text dated in 828 regularly renders this construction as *nazukete* (< *nadukete*) *Y to yū* (< *iFu*).

Down to the early Tokugawa period an unusual style of *kanbun* reading was common in many schools; it is called *monzenyomi* "the *Wen-hsüan* reading," after the name of a well-known Chinese anthology of poetry. The chief characteristic of this style was its amazing redundancy. Whenever possible it repeats the Chinese word to be glossed in *kan'on*, and then explains it with Japanese *kun*, often introduced by the Japanese quotative particle *to*. Here as in other respects it clearly shows its origins in the oral traditions of the Japanese classroom.

A good example of the *monzenyomi* is the first four lines of the Chinese *Shih-ching* (*Book of Odes*):

kuan kuan chü chiu	*kuan-kuan* cry the ospreys
tsai ho chih chou	on the island in the river;
yao t'iao shu nü	the modestly retiring virtuous young lady
chün tzu hao ch'iu	is a fit bride for our prince.

In the *monzenyomi* tradition this was glossed as follows:

kankan (< *kwankwan*) *to yawaragi nakeru shokyū no misago wa*
"the ospreys which are *shokyū* (*chü chiu*) [and] which cry softly *kankan*"
kawa no shima ni ari
"are on the island in the river";
yōchō to shizuka ni tadashiki shukujo no otome wa
"the young lady who is a *shukujo* (*shu nü*) who is proper and quiet in a *yōchō* (*yao t'iao*) fashion"
kunshi umabito no yoki tagui nari
"is a good match for the *kunshi* (*chün tzu*) [which is to say,] a person of high station."

We can almost hear the teacher of Chinese in early Japan calling out the Chinese words here in their *kan'on* equivalents and then immediately glossing them in Japanese, meanwhile working the whole into a fairly intelligible Japanese version for his class. But as time went on this kind of glossing tended to get further and further away from the original, so that with the revival of more serious Chinese learning in the Tokugawa period this style was gradually pared away to produce the direct ancestor of the more chaste *kundoku* with which we are familiar in modern times. The above *Ode* in the later Tokugawa tradition, as codified in the textbooks of the Meiji period, is as follows:

kankan taru misago (or, *shokyū*) *wa*
kawa no su ni ari;
yōchō taru shukujo wa
kunshi no yoki tsure (or, *kōkyū*).

As can be seen from this, differences still survive, particularly on the subject of whether to gloss a word in Japanese *kun* or in Chinese *kan'on;* but there is now general agreement that the grammar should be kept as terse as possible and that as a general rule nothing should be put in the Japanese text that does not directly correspond to something in the Chinese original. Thus, the *monzenyomi* completed the last sentence above with *nari* "is," but in the later more chaste style of *kundoku* the word *nari* "is" is generally permitted only when the Chinese original ends with Chinese *yeh.* In some ways, the results remind us of the modern generative grammarians and their productive rules and magic arrows, out of which language is "generated" by the application of processes and operations to certain given items. Viewed in this way a classical Japanese text could almost be considered a "generation" on the basis of a *kanbun* original, either real or imaginary, produced by the rigorous application of rules and operations to the elements overtly indicated in the Chinese text. But by and large the gain in conciseness in the later, more chaste *kanbun* style has been at the expense of meaning and understanding.

In Japan as in China, traditional society attached great importance not only to being able to write the Chinese characters correctly but also to the ability to write them in a graceful, flowing hand in which the various strokes of the individual character were smoothly run together. The Chinese distinguish three chief varieties of such handwriting: *k'ai* "square (or, printed)," *hsing* "running," and *ts'ao* "cursive." The "square" hand is easy enough to define, but the other more graceful variations of the script tend to blend into each other, and in the hands of a master calligrapher an almost infinite number of intermediate stages in both the "running" and "cursive" hands are possible.

So long as the main employment of writing in Japan continued to be for composition in Chinese, or in what could pass for Chinese, the *man'yōgana* characters used as phonetic transcriptions for Japanese words and texts quite naturally continued to be written in their "square," non-cursive forms, just as the Chinese characters used in writing Chinese proper generally were. This tendency was especially reinforced by the production of an important group of Sino-Japanese bilingual texts, including several early lexica, around the year 900. These presented Japanese words and short texts, chiefly poems, side by side with Chinese, and hence the *man'yōgana* used here to transcribe the Japanese was naturally written in the same formal "square" hand that was employed for the Chinese.

Examples include the *Shinsen jikyō* (*Newly Selected Mirror of Characters*), the first lexical text to provide Japanese glosses for Chinese words in a systematic fashion. It was completed in the period 898–901, and contains about 3000 entries. Its Japanese glosses are written in *man'yōgana* and show the eight-vowel system of Old Japanese, but it is clear from other evidence that this phonology was to a large extent "written into" the text by drawing upon earlier sources and at the same time reproducing their earlier *man'yōgana* orthography so that it does not actually reflect the somewhat different pronunciation of the period when it was written. The *man'yōgana* are also used in the *Wamyō ruijushō* (*Classified Glossary of Japanese Words*), a similar work completed around 934 by Minamoto Shitagō (911–983). Its Japanese *man'yōgana* glosses to Chinese lexical entries are a basic source for early Japanese, even though again its use is somewhat complicated by the fact that this text too draws upon earlier sources and hence has a somewhat retrospective phonology. But its glosses do represent the pronunciation of its time, for example, in their confusion of Old Japanese *e* and *ye*. (This text is often cited by Japanese scholars simply as the *Wamyōshō*, among several other shortened variants of its full title.)

Even the original text of the important *Ruiju myōgishō* (*Classified Glossary of Words and Meanings*), written by an anonymous priest sometime after 1081, used the *man'yōgana* in their "square" written forms, which it lines up alongside the Chinese characters of its Chinese text. This text is especially important as a source for Japanese historical phonology since, as already mentioned, it gives information concerning the system of distinctive pitch contrasts in the language of its time. In all these cases it is easy to understand why aesthetic considerations of balance made for the preservation of the full "square" character forms for the *man'yōgana*.

The original *Ruiju myōgishō* text, however, was in its own day already something of an anachronism in this respect, and from the time of the 905 *Kokin wakashū* (*Collections of New and Old Japanese Poetry*) the tradition became more and more firmly established for writing the *man'yōgana* in increasingly abbreviated "running" and "cursive" forms; and it was out of this that the Japanese syllabary proper, known since Edo times as *hiragana* "the smooth *kana*," developed.

In this way, then, the Japanese *hiragana* syllabary was a further graphic development from the "running" and "cursive" versions of the Chinese characters in which the *man'yōgana* characters were written. This development eventually produced, in the *hiragana* syllabary, "cursive" versions of the original Chinese characters unintelligible to a Chinese then or now. When this point had been reached and passed, the Japanese syllabary was no longer cursively written *man'yōgana*, but had become in fact Japanese *hiragana*.

As noted above, the term *hiragana* itself is late. In the Heian period this cursive syllabary development of the *man'yōgana* was generally called *onnade* "women's hand," or *onna moji* "women's graphs," in contrast both to the Chinese characters themselves and to the *man'yōgana* written in the "square" Chinese hand, which were called

FIGURE 1

The two *kana* syllabaries and their sources

The *katakana* (top) and *hiragana* (bottom) syllabaries are shown here together with the original Chinese characters of which they are abbreviations or cursive writings. The sources for all the *katakana* symbols are given in the top half of the table; the original Chinese character for the *katakana* symbol for *a*, for example, is the larger graph at the top of the extreme right-hand column, between the roman letter *a* and the *katakana* symbol itself. The extreme right-hand column has the symbols for the vowels alone; the others are combinations of consonant plus vowel, and their values may be read off by taking the combination at the intersection of one of the five vowels with one of the nine consonants in the middle of the page. Thus, the second character in the fifth column from the right is *ni*, at the intersection of *n* and *i*. The bottom half of the table shows the *hiragana* syllabary, and gives the original Chinese characters only when the origin for a given *hiragana* symbol is different from the origin for the *katakana* for the same syllable. Thus, for example, *ke* (at the intersection of *k* and *e*) in the *hiragana* syllabary has a different origin from *ke* in the *katakana*, but *ka*, *ki*, *ku* and *ko* in both syllabaries have identical origins. The symbols for the syllabic nasal *-n* are of later origin and do not appear here.

		k	s	t	n	h	m	y	r	w
a	阿 ア	加 カ	散 サ	多 タ	奈 ナ	八 ハ	末 マ	也 ヤ	良 ラ	和 ワ
i	伊 イ	幾 キ	之 シ	千 チ	仁 ニ	比 ヒ	三 ミ		利 リ	井 ヰ
u	宇 ウ	久 ク	須 ス	川 ツ	奴 ヌ	不 フ	牟 ム	由 ユ	流 ル	
e	江 エ	介 ケ	世 セ	天 テ	祢 ネ	部 ヘ	女 メ		礼 レ	恵 ヱ
o	於 オ	己 コ	曽 ソ	止 ト	乃 ノ	保 ホ	毛 モ	與 ヨ	呂 ロ	乎 ヲ

a	あ 安	か	さ 左	た 太	な	は 波	ま	や	ら	わ
i	い 以	き	し	ち 知	に	ひ	み 美	ゆ	り	ゐ 為
u	う	く	す 寸	つ	ぬ	ふ	む 武		る 留	
e	え 衣	け 計	せ	て	ね	へ	め		れ	ゑ
o	お	こ	そ	と	の	ほ	も	よ	ろ	を 遠

otoko moji "men's graphs." These names are not, however, to be taken literally. Especially they are not to be understood to mean that men only wrote in Chinese or in the "square" hand *man'yōgana,* and that women wrote only in *hiragana* or that they were particularly responsible for its development as a way of writing Japanese. Education in reading and writing in the Heian period began with the cursive syllabary, but women hardly ever passed beyond this stage in their education while men went on to learn to read and write proper Chinese. The authoress of the *Genji monogatari* tells in her *Diary* how she was able to learn a little Chinese by eavesdropping on her brother's lessons in the language, and how later she and the Empress whom she served as lady-in-waiting used to practice reading Chinese texts "very secretly, in odd moments when there happened to be no one about"; but she adds, "it was not long before I repented . . . ; for person after person assured me that even boys generally become very unpopular if it is discovered that they are fond of their books. For a girl, of course, it would be even worse; and after this I was careful to conceal the fact that I could write a single Chinese character. This meant that I got very little practice; with the result that to this day I am shockingly clumsy with my brush." As Arthur Waley, the translator of these lines puts it, that the Empress and Murasaki should have wished to learn Chinese must have been as shocking to their fathers as it would have been to Gladstone if his daughters had wanted to take up boxing.

So long as the texts were official documents, histories, lexica, and other formal works in which Heian men could properly be expected to have an interest, in terms of the society and its values, the *man'yōgana* tended to continue to be written in the same formal "square" hand that Chinese texts themselves demanded, while the cursive *kana* syllabary found its natural employment, by both men and women, in jotting down short Japanese poems, writing personal letters, and other private matters. Since unlike the formal histories and official documents these were all activities involving the use of writing in which Heian women also participated, this in turn led to an association of the *kana* syllabary with women.

At any rate, the period of a few years from 901 on was a particularly important one for the development of the Japanese *kana* syllabary as a script deriving from Chinese origins but representing a unique and distinctive development in Japan; and from about this time on, *kana* became the normal medium of writing for texts involving the Japanese language.

The earliest document employing the *hiragana* syllabary had until recently generally been held to be a fragment of paper found inside a Buddha image in a temple in Kyoto, which records in correspondence with 938 the birth of Chōnen, a celebrated Japanese Buddhist priest and traveller to China. But somewhat more recently another document dated in correspondence with 905 has been found on the back of which there appears to be a fragmentary text in *hiragana.* This would be in accordance with the evidence from other sources which indicates that it was shortly following 901 that both varieties of *kana,* the *hiragana* and the *katakana,* came into fairly general use throughout the upper levels of Heian society.

Just as the *man'yōgana* system itself had been pluralistic and polyvalent, so also was the early *hiragana* syllabary. It would have been just as easy for Heian society to have used one and only one *kana* sign for each syllable of the language as it would have been to have had one and only one *man'yōgana* sign for each syllable of the Nara language. But once again this would have been a decision which would not have suited the aesthetic tastes of Heian times. Differently written cursive variations of an already large number of signs for a single syllable now only added to the pluralistic nature of Japanese script, rather than reducing it. The simple *kana* scripts with which we are familiar today, with (by and large) one and only one sign for each syllable of the language, were not settled upon as the result of a long process of gradual reduction in graphic redundancy sometime after 1868, although a certain amount of simplification in this respect began to be noticed from about the middle of the eleventh century on.

Even down to the present day, handwritten personal letters have often employed a certain number of additional cursive *kana* symbols which were not officially considered a part of the *kana* syllabary, and as late as the middle Meiji period printers even sometimes cut special types for such graphs when setting up the manuscripts of books and articles! Today these additional aberrant cursive *kana* symbols are called *hentaigana* "deviate *kana,*" and they are generally thought of as additions to the customary *kana* repertory; but in historical fact they are rather survivors from the earlier periods when *kana* implied a more prolix system than it does today. In this sense, the present-day *kana* syllabaries were not so much invented as they were left standing as the end-products of centuries of slow and gradual attrition, which chipped away the grander outlines of a once extremely prolix and redundant graphic system, so that by the modern period there was left only a bare (and very efficient) skeleton of the original.

Simultaneously with the *hiragana* syllabary the Japanese also developed another similar system which today is called the *katakana*, "square *kana*," in reference to its generally abrupt and rigid modern ductus when compared with the more flowing *hiragana* symbols. Like the *hiragana*, it too derives from cursively written *man'yōgana*, but in general the *katakana* was developed from cursive forms for parts or segments of the individual *man'yōgana* characters rather than, as in the *hiragana*, entire Chinese characters written cursively. Again as is true of the *hiragana*, the present modern *katakana* syllabary with its neat one-sign-to-one-syllable ratio is the comparatively modern result of discarding a great many other redundant signs along the way.

The *katakana* was chiefly developed in the early part of the Heian period as a shorthand script for recording Japanese glosses and readings in Chinese Buddhist texts. It was especially used by the clergy of the three older sects of Nara Buddhism, the Sanron or "Three-Treatises" sect, the Hossō or "Dharma-Character" sect, and the Kegon or "Flower-Wreath" sect. In its earliest specimens the *katakana* script has a rounded, smooth ductus not unlike that of many early *hiragana* specimens. It was differences in the circumstances of their development and the employment to which the two varieties of script were put which first marked their clear differentiation from each other, rather than any essential graphic differences. The *katakana* was in its origins essentially a personal hieratic script, and as such extended the polyvalent and redundant features of the *hiragana* even further. As was also the case with *hiragana*, the period from about 901 on saw *katakana* too come into general use, apart from its continued employment for glosses and marginalia to Chinese texts for which it continued to be popular, with subsequent reduction in the number of signs employed and a gradual graphic drift away from the flowing ductus which characterized the *hiragana* into a more rigid and angular style.

For elementary teaching purposes the *kana* symbols have at various times been arranged into mnemonic word lists which contain all the *kana* symbols without repetitions; one such is the *ame tsuchi* list, which begins *ame* "heaven," *tsuchi* "earth," *hoshi* "star," *sora* "sky," *yama* "mountain," etc. It dates from the Heian period and provides a certain amount of insight into the phonology of the time, though certain of the words which appear in it are today obscure and as a result now open to different interpretations. A somewhat later example but one still of Heian date is the *iroha* list, which makes the syllabary into a Japanese poem of Buddhist tone in which each sign is used only once; it is generally thought today to have been the work of the priest Kūya (903–972) or of the priest Senkan (918–983), or of one of their disciples. In this poem the *kana* signs are arranged in the following order which is often used for enumeration, like "a, b, c . . .":

i ro ha ni ho he to chi ri nu ru [w]o
wa ka yo ta re so tu ne na ra mu u
[w]i no o ku ya ma ke fu ko e te a
sa ki yu me mi si [w]e hi mo se su .

The poem upon which this order is based is, in modern Japanese and in an approximation of the Heian pronunciation, as follows:

Modern		Heian	
iro wa nioedo	chirinuru o	iro Fa niFoFedo	tirinuru wo
waga yo tare zo	tsune naran	waga yo tare zo	tune naramu
ui no oku yama	kyō koete	uwi no oku yama	keFu koete
asaki yume mishi	ehi mo sezu.	asaki yume misi	weFi mo sezu.

The subject of this poem, identified only by implication in the first line, is the blossoms or autumn leaves (which in Japan also count as *hana* "blossoms") which fall to the ground while still full of brilliant color; it is difficult to improve upon the translation suggested long ago by B. H. Chamberlain:

> "Though gay in hue, they flutter down, alas!
> Who then, in this world of ours, may continue forever?
> Crossing today the uttermost limits of phenomenal existence,
> I shall see no more fleeting dreams, neither be any longer intoxicated."

The poem's arrangement of the *kana* signs ignores consonantal voicing, so that *to* must be read *do*, *ka* read *ga*, *so* read *zo*, and *su* read *zu* in order for the result to make sense. It is particularly interesting to find an early Chinese loanword in the poem, *uwi* from Chinese *yu-wei* "(lit.) have acts," the equivalent of Sanskrit *saṃskāra*, in the sense here of all the evidences and aspects of phenomenal existtence brought about by *karma.* The word *niFoF-u* here is "to be bright in color," not "to be fragrant," and is related to the *-ni-* "red in color" noted above in connection with a possible Altaic etymology for *haniwa.* The metaphor of the last two lines of the poem compares the soul attempting to rise above these to a traveller wandering lost on a mountainside. In reading the poem in modern Japanese the word *keFu* "today" is read as modern *kyō,* but somewhat inconsistently *weFi* "intoxication" is read in an archaizing pseudo-historical pronunciation as *ehi* rather than as *yoi,* its normal development in modern Japanese.

Apart from these popular arrangements of the *kana* symbols for teaching purposes, other more sophisticated phonological arrangements were also made from an early period. These reproduce to a surprising extent the order for listing phonemes employed among the Indic grammarians, and clearly were developed in Japan under the stimulus of Indic phonological science. Partly this was acquired second-hand from Chinese sources but partly also it was studied directly by the Japanese in their work with texts in the characteristic variety of Indic script generally used throughout the Mahāyāna Buddhist world. This script the Japanese, following the Chinese, called *shittan,* for Buddhist Hybrid Sanskrit *siddhāṃ* "may it be perfected"; originally and in India this was not actually the name of the script itself but a pious admonition written on children's practice-boards at the beginning of each exercise set for copying.

The Indic order for listing phonemes as found in the arrangement of this so-called *siddhāṃ* script, as well as in all the Indic writing systems, arranges the consonants in the following order: *k, kh, g, gh, n̄, c, ch, j, jh, ñ, ṭ, ṭh, ḍ, ḍh, ṇ, t, th, d, dh, n, p, ph, b, bh, m, y, r, l, v, ś, ṣ, s,* and *h.* This is clearly the origin of the order for the consonants in the phonological arrangements of the *kana,* where the modern Japanese consonants appear in the following order: *k, s, t, n, h* (Old Japanese *F*), *m, y, r,* and *w.* Here the juxtaposition of modern *h,* Old Japanese *F,* with Indic *p* is interesting and significant; the only other point which needs particular comment is the location of modern Japanese *s* following *k.* This is easily understood since modern Japanese *s* goes back to the Old Japanese affricate phoneme /t^s/ which had an allophone [t^s] before Old Japanese /a, u, o, ö/ and an allophone [s] before /i, e/. Sanskrit *c* and the other members of its series were generally pronounced not as the classical [$t^{ś}$] affricates but as [t^s]

affricates in the particular variety of Buddhist Hybrid Sanskrit which was common in the Mahāyāna countries to the north of India. They appear as such in the earliest Chinese transcriptions (though in China many of these were later Sanskritized to conform to the classical pronunciation), and the Sanskrit *c*-series regularly appears in Tibetan as *ts, tsh-*, etc. Hence the location of Old Japanese /t^s/, modern Japanese *s* following the first velar entry was completely regular. The Japanese vowel order (*a, i, u, e, o*) is exactly the Indic one, and needs no special comment.

This Indic-inspired phonological analysis of the Japanese syllabary arranged it into five horizontal rows (*dan*), each named after the vowel with which it began (*a-dan, i-dan, u-dan, e-dan, o-dan*), and ten vertical columns (*gyō*). Nine of these were named after the consonant plus vowel symbol with which they began (*ka-gyō, sa-gyō, ta-gyō, na-gyō, ha-gyō, ma-gyō, ya-gyō, ra-gyō, wa-gyō*), while the tenth was an additional one at the beginning of the table containing the vowels only. Sound changes and the resulting falling together of certain combinations, in addition to some original gaps in the phonological patterning of the language, meant that all the 5 × 10 = 50 possibilities provided for by this grid were never completely filled, but the arrangement is nevertheless still called the *gojū'on zu* "chart of the 50 sounds." The earliest example of this kind of phonological arrangement of the Japanese syllabary is to be found appended to a set of phonetic glosses to a copy of a Chinese translation of the *Mahāmayūrī-vidyā-rājñi* in the collection of the Daigoji, a great esoteric Buddhist sanctuary in Kyoto, and is thought to date from the period 1004–1028. When somewhat later a *kana* sign was devised for the syllabic nasal phoneme *-n*, this sign was added to the "chart of the 50 sounds" following the last of the so-called "50," but it is not counted among them and was not originally a part of the table.

This "50-sound" arrangement of the *kana* syllabary has left important traces in the terminology as well as in the methodology of the traditional descriptions of the Japanese verb. In these treatments the term *dan* has been used to indicate several different entities—a distinct verbal stem, or stem plus ending, or complete verb form—and these *dan* have been thought of as being arranged in horizontal rows in the same *a, i, u, e, o* order as the "50-sound" *kana* tables. Verbs chiefly involving forms terminating in *-a-* and *-i-* in their inflections are thus, in this tradition, designated *kami nidan katsuyō* "inflected in the upper two rows [of the "50-sound" *kana* table], i.e., inflected for *-a-* and *-i-*, while verbs chiefly involving *-u-* and *-e-* are designated *shimo nidan katsuyō* "inflected in the lower two rows," i.e., for *-u-* and *-e-*, and verbs whose inflections involve forms in *-a-*, *-i-*, *-u-*, and *-e-* are *yodan* "[inflected in the first] four rows." In the same way, *kami ichidan* refers to inflections in *-i-* and *shimo ichidan* to inflections in *-e-* only, while more recently modern Japanese verbs with all five vowels in their inflected forms have been called *godan* "five row" inflections. (Below, when necessary to render these terms of traditional Japanese morphological analysis, *dan* has been translated "grade," as in "mono-grade" (*ichidan*), "bi-grade" (*ni-dan*), "quadri-grade" (*yodan*), quinque-grade" (*godan*), etc.) These applications of the *kana* syllabary phonological arrangements to the description of Japanese verb morphology were initially the work of the philologists of the Edo period, beginning with Tanigawa Kotosuga in 1762 and Kamo Mabuchi in 1789.

Both the Japanese *kana* syllabaries were and are completely efficient and scientific orthographies which potentially provide a workable phonemic notation for the language in all its features, especially when modified by the addition of a few minor diacritic devices. The great difficulties which Japanese orthography has not yet freed itself from even today began to make themselves evident only when the *kana* syllabaries were used not as complete systems in and of themselves but as supplementary writing systems alongside of and in conjunction with Chinese characters. This is the way in which the script still operates in modern Japan, and it represents a most unfortunate outcome of otherwise promising orthographic materials.

In the Heian period and even for some time after, the situation was far more satisfactory. When texts were written in Chinese, they were in Chinese characters; when they were in Japanese, they were in *kana*. The breakdown of this most useful differentiation, resulting in the widespread use of Chinese characters and *kana* together to write Japanese texts, took place for two major reasons and along two chief lines.

First of all, it was only natural that as the language introduced more and more Chinese loanwords into its vocabulary these would be written in the texts using the same Chinese characters which were used to write the Chinese originals of these loanwords. This had been true throughout the Heian literary texts in *kana*, and caused no great difficulty. Chinese graphs for Chinese words was not a difficult rule to remember nor one likely to cause any troublesome ambiguity in reading texts. To the contrary, it helped further to identify these loanwords, which in their phonology and structural distribution continued for some time to be distinctive from original Japanese vocabulary items. And at the very least, it gave an extremely decorative flourish to the written page.

But the second way in which the system broke down is somewhat more difficult to explain and rather less pleasant to contemplate. It is intimately tied up with the *kanbun* reading tradition, and took place roughly in the following fashion. When the system of reading Chinese texts (both original Chinese texts and those written in Japan) as if they were Japanese became well established, one apparently unavoidable but unfortunate side-effect was that Heian society by and large began to treat both Chinese and Japanese as if they were the same language. If a Chinese text when read and studied sounded just like a Japanese text, it was indeed and for all practical purposes a Japanese text. And if you wrote Chinese and read Japanese, why not go one step further and write Chinese even when the intention from the beginning was to read (i.e. actually to write in) Japanese. In this way, writing in Chinese characters often became nothing but an elaborate way of writing in Japanese. But since the various syntactic twists and turns to which the completed text in Chinese characters would have to be subjected in order eventually to make it come out in Japanese were exceedingly difficult to remember, shorthand reminders in *kana* were more and more often sprinkled among these Chinese texts intended to be read as Japanese. With this, the two writing systems, Chinese and Japanese, became once and for all inextricably entangled with each other, as indeed they remain to this day.

In this sense, it can accurately be said of the Heian and later periods that people often did not really know what language they were writing in, Chinese or Japanese; and we are often in no better position to make a judgment on the question when we study some of the documents they produced. A sample from a typical example will make clear the kind of fatal intermingling of Chinese script and language with *kana* script and Japanese language which soon resulted. The following two lines are from a manuscript in the collection of the Tōdaiji in Nara, but dates from roughly 850; elsewhere this document shows that it dates from that portion of the Heian period when the distinction between Old Japanese *o* and *ö* was still maintained only after *k*-, while otherwise the older Nara eight-vowel system had already been levelled out. To make the discussion at all comprehensible, the text fragment has here been transcribed according to the following system: Chinese characters have been transcribed in modern Pekingese in SMALL CAPITALS, with their semantic value as Chinese rendered in English translation under each form in [ ], while the Japanese *katakana* appearing in the original has been transcribed in italics:

Text:	SUI	SHIH	CHIEN *na ka ni*	TUO	NAN	ERH	WU	SSU
	[though]	[world]	[area]	[many]	[man]	[but]	[not]	[resemble]
	FU	CHÜN	NAN	SUI	KUO	NEI	TUO	NÜ
	[father]	[lord]	[man]	[though]	[land]	[inside]	[many]	[woman]
	WU	SSU	MU	SHIH *ni*				
	[not]	[resemble]	[mother]	[lady]				

If we look at this text believing it to be Chinese, it starts off promisingly enough, with a phrase that can be understood as "even though the world . . . ," but then it immediately runs off into a spate of *katakana* symbols, *na ka ni* . . . , after which it again resumes as Chinese, with "many men but . . . ." But regardless of the script, the language which was being written here was Japanese, not Chinese, and the purpose of the *katakana* was to provide some of the necessary clues to this fact. Still, in addition to what information the text does provide, a good deal of syntactic gymnastics are still necessary in order to re-arrange the Japanese vocabulary items here (there are no Chinese loanwords in the text itself, as it turns out) and grammatical features such as *iedomo* "even though," all of which have here been written as Japanese *kun* going with Chinese graphs, which are however arranged not in Japanese word-order but in an approximation of what the Chinese word-order would have been if the text had been Chinese, not Japanese. And other Chinese graphs, as for example the frequent *erh,* have simply been added to the text to make the result look even more like Chinese, and correspond to nothing whatsoever in the eventual Japanese version underlying the text.

A complete Japanese rendering of the above text, making the necessary conjectures and supplying the necessary items not overtly written is as follows: *yo no naka ni otoko ōshi to iedomo chichigimi ni nitaru otoko nashi; kuni no naka ni onna ōshi to iedomo hahagimi ni nitaru onna nashi* "though there are many men in the world, there is no one like one's father; though there are many women in the land, there is no one like one's mother." This text shows almost all the ills that this kind of combined Chinese and Japanese orthography was heir to; and the passage of time did little to alleviate any of them.

Most critical were the problems presented by attempting to write inflected Japanese forms with combinations of Chinese characters and *kana*. In principle, the Chinese character was to be used, as a *kun* writing, for that portion of the inflected form which did not change, and *kana* for the inflections. On the face of it this sounds like a reasonable compromise, if we admit that Chinese characters are to be used at all, but it proved to be far more difficult in its application than it sounds. Many Japanese inflections consist of adding vocalic elements to stems ending in final consonants. But the syllabic *kana* orthography has signs for the consonants only in combination with the vowels, which meant that the final consonants of such inflected stems would always be redundantly written in the *kana* following the Chinese character. For example, in the verb *hanas-u* "speak," the final *-s* of the stem remains constant in all inflected forms: *hanas-u*, *hanas-azu* "not speak," *hanas-aser-u* "cause to speak," etc. If the decision were made to write the unchanging part here with the Chinese character *hua* "speak" this character should by the same theory be taken to write *hanas-*, but in general it has been taken to write only *hana-*, leaving the *-s-* as well as the following inflectional elements to be written in *kana*. The *kana* used to write inflections following such forms is in modern times called *okurigana* "sending (i.e. guiding) *kana*," and its consistent use is one of the continuing difficulties of the hybrid Japanese writing system which has persisted until the present time.

The continued use of Chinese characters to write Japanese words as well as Chinese loanwords, plus continued uncertainty about the use of *okurigana* in writing inflected Japanese forms, were the two major handicaps which the writing system brought with it into modern times. In 1927 the major Tokyo newspapers kept in stock printing type for between 7500 and 8000 different Chinese characters, and it was estimated at the time that an "educated reader" would be "familiar" with about 5000 of these. But to be "familiar" with a Chinese character as it is used in writing Japanese implies a good deal more than would a similar knowledge of the same Chinese character used to write Chinese. This is because of the potential multiple use of almost every character for writing not only one or more different pronunciations in Chinese loanwords but also for writing one or more different Japanese words. In most cases the writing system in modern times has restricted itself to one or two Chinese readings and one or two Japanese readings for any given character, but there are plenty of examples of characters used for many more of each.

Down to the end of World War II no effective limit was exercised on the number of Chinese characters used in printing and publishing. As a result virtually any character known in Chinese was in theory available for use in Japanese, and the potential burden of this on both writer and reader (not to mention the typesetter) was enormous. A popular pre-war Japanese dictionary of Chinese characters as used in the Japanese writing system listed a total of 14,924 Chinese characters; but even this large total represented only a fraction of the complete corpus potentially available. The most elaborate Japanese dictionary of Chinese characters yet produced, finished only a few years ago, lists a grand total of 48,902 different Chinese characters. Even though many of this number are graphic variants of each other or characters which occur only once or twice in obscure Chinese texts, the total number is still surprisingly great.

One reaction to the burden imposed by this use of large numbers of Chinese characters in writing Japanese was the system of *furigana* (< *furi-* deverbal from *fur-u* "brandish"). This system used small *kana* placed along the right-hand side of Chinese characters indicating their correct pronunciation in the particular text in which they were used. Down to the end of World War II most daily newspapers and a great many popular books and magazines included such phonetic glosses for virtually all the Chinese characters which they used. At this point the Japanese writing system had in every sense of the word come full circle; as one perceptive critic put it, "One hesitates for an epithet to describe a system of writing which is so complex that it needs the aid of another system to explain it."

As Japan came into close contact with the Western world, not a few persons argued in favor of abolishing the whole cumbersome system of using Chinese characters in writing Japanese. Somewhat less understandably some even argued in favor of abolishing the *kana* syllabary and writing Japanese entirely in Roman letters. For most of Japanese society, however, the writing system with all of its difficulties and absurdities was an integral part of Japanese culture and as such worthy of preservation, no matter what the cost of maintaining it might prove to be. This attitude was somewhat shaken by Japan's defeat in the war, and after 1945 there was a short period when it seemed to many that the advocates of reform or abolishment of the traditional Japanese writing system and particularly of its use of Chinese characters would be listened to with renewed respect and interest. Such, however, did not actually prove to be the case. Even though certain elements in the Allied occupation forces argued strongly in favor of increased use of romanized transcription in writing Japanese, their demands were in general met by a slight increase in the amount of time devoted to teaching the spelling and writing of romanized Japanese in the elementary school system. There was no appreciable interest in publishing or giving circulation to printed matter in romanization, and eventually the entire romanization movement gained no advantage at all from Japan's temporary military and administrative captivity.

The total abolition of Chinese characters or extreme limitations on their use was also urged by many occupation authorities and by some Japanese, but these measures too were considerably tempered in actual application. On November 16, 1946, the Japanese Cabinet and Ministry of Education together (the combination indicating the seriousness with which such matters are treated in Japan) issued a list of 1,850 Chinese characters under the title *Tōyō kanji hyō* (Table of Chinese characters to be used for the time being). The list purported to be a table of those Chinese characters which would continue to be used "temporarily" while further and more thoroughgoing reforms in the writing system were being carefully thought out. The list also included Japanese and Chinese-loanword pronunciations for these characters which were also approved for use "for the time being." An American scholar of the Japanese language wrote in 1948 of this list, "The reduction to 1,850 characters is undoubtedly meant to anticipate a future time when all the *kanji* will be outlawed and when the Japanese language will be written entirely in romanization." This prediction has, of course, proved to be one of the classic examples of the clouded crystal ball.

What was at first officially labeled as a list of characters for use "for the time being" has now become instead the basic list of Chinese characters about which the primary and intermediate Japanese education system centers. The first 881 Chinese characters on the list are now regarded as the basic curriculum of Chinese characters to be taught the first six years of Japanese elementary education. Most Japanese newspapers as well as popular and semi-serious magazines today restrict their typography to these 1,850 characters, though the publishers themselves have, without government sanction, dropped 28 characters from the list and replaced them with 29 other characters they thought would be more useful for their purposes—a good example of those tiny freedoms within rigidly enforced systems which characterize, and probably are in many ways the secret of, much of

Japanese society. When a word occurs in a manuscript which would exceed the limits of this list of characters the usual practice is either to print the word in *kana* or to use Chinese characters even though they do not appear on this list, and then to include the pronunciation in *kana* in parentheses following these non-listed characters. *Furigana* today is hardly if ever seen except from time to time in specialized works. Technical and scholarly writing and publishing pays no attention at all to the list.

The total list of 1,850 characters provides a convenient point of departure for the study of the written Japanese language both by Japanese and by foreigners, but for neither of them is it in any sense an answer to the problems presented by the script and its mastery. Not the least of the reasons for this is the fact that the list makes very little provision for personal and place names. As a matter of fact, a certain number of these were added as a supplement to the list following its original publication, since without them so many practical problems arose in its application. However, even in its slightly expanded form it still makes no provision for writing such common family names as Satō or such common place names as Kamakura.

In this as in many other ways this list of 1,850 Chinese characters reflects very clearly the haste with which it was drawn up and the unsettled conditions in post–World War II Japan. The decisions which led to the inclusion or exclusion of characters were more often bureaucratic than linguistic, and it is in no way a basic vocabulary, nor even a basic vocabulary with reference to the writing system. But in spite of all these drawbacks the list of 1,850 Chinese characters appears to be here to stay.

As one part of the "reforms" instituted by this list, a certain number of the Chinese characters included on it were authorized to be written in simplified or otherwise abbreviated forms (*shinjitai*, "new character forms"). Many of these were cursive forms which had been widely used in unofficial handwriting since the Heian period but had until now been considered "incorrect" for educational or other official purposes. With their inclusion in this list these "new" forms became the "correct" forms and the original, full written forms of the same characters became "incorrect," at least as far as school examination papers were concerned. Printers, except for those dealing in sinological or other specialized materials, today generally stock only the "new" forms for a character, when such exist, but handwritten signs and other similar texts, including personal letters, often make indiscriminate use of the "new" forms and of the original forms of the Chinese characters. As a result, one who is learning to read and write the language today must be familiar with both.

Most of these Japanese "new character forms" differ considerably from the far more extensively abbreviated writings adopted for many of the same characters in the Chinese People's Republic. This fact has served even further to sever whatever cultural community between the two countries had until recently resulted from their possession of a common writing system. Indeed, since the introduction of these mutilated forms for the Chinese characters in China and the widespread use of the "new character forms" in Japan, the only country in the world that at this writing is still using the traditional Chinese script graphically unaltered is the Republic of China on Taiwan.

The introduction of the "new character forms" in Japan was of course an attempt to simplify the labor needed to learn to read and especially to write the characters, but since the student must now learn both the new and the old forms for many of the characters, its effectiveness is questionable.

The Japanese public has generally forgotten both the immediate circumstances out of which the list grew and the great haste with which it was compiled. It has even more completely lost sight of any concept of this list as an intermediate stage on the way to abolition of the use of Chinese characters in writing Japanese.

The problem of *okurigana* remains a difficult one. On July 10, 1959, the same Japanese government authorities responsible for the *tōyō kanji* issued a list of suggestions on the use of *okurigana* to be followed in Middle School textbooks from April 1962 on. As these suggestions are gradually introduced into the educational system they should eventually go far to unify the usage of *kana* in this area of the writing system.

At the same time as the *tōyō kanji* the Ministry of Education also issued rules which reformed the other *kana* spellings, apart from *okurigana*, according to a system which is now known as *gendai kanazukai*, "modern *kana* spellings." Until this time *kana* spelling was largely according to historical principles; thus, verbs inflected in *-u* from Old Japanese *-Fu* were still spelled with *kana* symbols that indicated this historical derivation, and in the spelling of Chinese loanwords in *kana* other historical evidences were maintained in this writing system. For example, the word "butterfly," a Chinese loan, was spelled in *kana* as *tefu*, even though the modern pronunciation is *chō*.

This *chō* represents a regular historical development from an earlier sequence *tefu* < *teFu*. For the student of historical phonology such spellings were significant, but they were difficult to justify as part of a modern writing system. In the reformed "modern *kana* spelling" *chō* is spelled *chi* + *yo* + *u*, and not distinguished from syllables pronounced *chō* but deriving from other historical sources. With the *gendai kanazukai* almost all of these historical spellings were abolished, and the *kana* began to be used, probably for the first time since the Heian period, as an almost entirely rational and phonetic script.

This, then, is the inheritance of different scripts and their usages with which Japan has entered the twentieth century. The writing system in use in Japan today is a cumbersome one, but so in a sense are all writing systems. It puts unusual burdens upon the child who must learn it in school, but so does English spelling. It provides problems which tax the ingenuity of the engineer and designer in adapting it to modern telecommunications and similar requirements, but so does every other writing system known. Japanese society today appears to have not even an idiot fringe which still seriously proposes "doing anything" about the writing system. The extremely limited kind of "reform" represented by the *tōyō kanji*, actually only a slight limitation on the use of Chinese characters, has apparently satisfied those elements which had looked for some change in this area of modern Japanese culture. The system has shown itself to be almost incredibly durable. It was able to survive the social and psychological upheavals of Japan's defeat in the war and her military occupation with no basic or significant change, and there is little reason to suspect that it will be any more vulnerable to whatever the future may have in store for the country and its people.

Probably no language on earth has ever been written exactly as it is spoken. The only apparent exceptions to this statement actually go to prove the rule since they are phonetic or other precise transcriptions made for specialized purposes of study or linguistic recording and not examples of writing as a social adjunct to language itself. In Japanese, as in most languages with long histories within a complex culture, the differences between the linguistic forms used in writing and those used in speaking have always been of great importance.

In the broadest terms one may divide all Japanese into two main varieties—popular or colloquial, and learned. This major dichotomy, like those which follow immediately below, is largely a matter of choice of the inflected forms used. There are other differences in choice of certain lexical items and also in the choice and use of the grammatical particles, but by and large the main dividing lines are to be found in the choice of inflected forms.

The popular varieties of language may be listed as follows: (1) plain speech, the language of daily life, colloquial language in its usual and ordinary sense. This is the down-to-earth way in which Japanese talk among themselves, as for example among workmen, waitresses, students, and others in situations where differences in social status between the speakers are neither marked, important, nor striking. This is the speech used within the family, with intimate friends, and in similar social situations. A sub-variety which must also be considered here is the contracting style whose principal characteristic is the frequent coalescence of sequences of two or more syllables into one (*itte shimatta* > *itchatta* "[completely] gone"). For any utterance in the contracting style there is a parallel utterance in the non-contracting style, typically in plain speech.

The second main variety of popular speech is a somewhat refined version of the first which may be called (2) the impersonal or formal style of speech. This is the speech of the public lecturer, the radio announcer, and in its written form that of many books and magazine articles, especially in the post-war years. It is distinguished from the first variety chiefly by the choice of different inflected verb, copula, and adjective forms, and by certain characteristic syntactic patterns which, if they can be categorized at all, tend to be somewhat longer and slightly more prolix than in the first variety.

The third variety of popular language is that variety of formal speech which is today often used in writing books and other fairly serious works; it may be called (3), the colloquial written style. It differs from (2) above in that it has a greater tendency to borrow from varieties of learned speech than from varieties of popular speech.

Under learned language we deal almost entirely with written varieties of language, although there is little or nothing to prevent them from being used orally as a kind of displaced discourse. The main varieties here are (1) the classical and semi-classical written style, (2) the formal written style, and (3) the epistolary style. In modern Japan all three of these are virtually obsolescent. The classical or semi-classical style is largely based on the inflected forms and the syntactic patterns of late Old Japanese. It neglects forms and constructions which were localized among only a few texts and has drawn for its main repertory from the common body of late Old Japanese forms. The formal written style was required for any official or semi-official writing and correspondence down to the end of World War II. It further selected among the forms of this first variety, while adding to them all of the neologisms based on Chinese morphemes and other neo-classical terms with which Japanese enriched itself in the modern period. The epistolary style, now completely obsolete, was a variety of the classical language used for letters, notable for its special verb inflections and other decorative linguistic devices, particularly for the frequent use of the euphemistic verb *-sōrō*, originally "to wait upon in a respectful fashion," later simply for "to be," replacing the copula and a variety of auxiliary verbs.

A study testing the survival of older inflected forms from earlier stages of the language in modern written Japanese has shown that on the front pages of the post–World War II *Asahi shinbun* (Tokyo edition) for November 27, 1946, and February 7, 1947, a total of 21 different inflected forms were used which could be identified as belonging to the older literary conjugations. This is in contrast to 46 such forms which were identified in the same study on the front pages of the pre-war *Tokyo Nichinichi* and *Yomiuri* newspapers for April 19, 1940. The 46 different inflected forms found in the pre-war newspapers occurred in 162 different examples, whereas the 21 different forms in the post-war newspapers occurred in only 50 different examples. Fragmentary though this evidence is, it serves to indicate the rapid acceleration in the colloquialization of the literary style in the years immediately following the conclusion of the war.

Chapter 4

Dialects

What we call Japanese is today the language of some 94,000,000 people living on the four main Japanese islands plus some 678,000 persons on the island of Okinawa. Once a part of the Japanese empire, Okinawa has for the two decades since the conclusion of World War II been administered by American military occupation forces. The political and administrative future of Okinawa has in recent years become a hotly contested issue both in Japan and on the island itself; but whatever happens the language of the island's inhabitants for the foreseeable future no doubt will remain Japanese.

This has not been the case with the other geographically proximate remnants of the Old Japanese empire, Korea and Taiwan. In Korea, where today the administration is split between a People's Republic in the north with a population of approximately 10,000,000 and the Republic of Korea in the south with some 25,524,000, the use of the Japanese language was mandatory in government and in education for the entire period of the Japanese administration. The removal of Japanese political and military control at the end of World War II was the signal for a strong reaction against the use of the Japanese language. Even now, decades after the conclusion of hostilities and the withdrawal of Japanese administration from Korea, this reaction continues unabated.

The island of Taiwan, with a population of approximately 11,242,000, has been somewhat similar to Korea in this respect. Here too, the withdrawal of Japanese administration at the conclusion of the war was the signal for the rejection of the Japanese language in favor of the local variety of southern Chinese. This movement away from Japanese was accelerated by the coming of the defeated remnants of the Nationalist Government forces to the island after the establishment of the People's Republic in mainland China, and their subsequent official emphasis on the use of Pekingese.

Even today, any Korean or Taiwanese old enough to have received any significant amount of his education during the Japanese administration of either area can still use the Japanese language freely. Whether or not he does is not so much a linguistic question as it is an emotional and patriotic one. On Taiwan, that large segment of the population that pre-dates the establishment of the provisional Nationalist capital on the island still uses Japanese freely and, when the occasion presents itself, enthusiastically.

Another overseas adventure which earned nothing but lasting ill-will for the Japanese nation was the comic-opera state of Manchukuo, a puppet kingdom in north China operated from behind the scenes by Japanese military and financial interests. Manchukuo was wiped from the map and very nearly from history by the advance of the Soviet Red Army into the Far East during the last hours of World War II. Its language officially was Pekingese, but of course it was the Japanese of the persons behind and around its exceptionally wobbly "dragon throne" in which the work, such as it was, of the short-lived nation was really performed. (Of the Manchu language itself even the puppet emperor "Henry" Pu-yi, though he was the legitimate heir to the Manchu throne and the last male head of the Manchu royal house, knew only a few words of conventional greetings.) The accumulation of hatred which the Manchukuo adventure earned for Japanese administration and finance extended also to their language. Today Chinese born in north China and educated there during the period of the Manchukuo government may recall a few words or phrases of broken Japanese; otherwise the Manchukuo bubble and its collapse were without linguistic significance.

Within the Japanese home islands there is evident today an amazing amount of linguistic uniformity. We know that early in Japanese history there were considerable numbers of aboriginal peoples still living on Honshū who were not considered part of the Yamato race and culture, and there is no reason to assume that their dissimilarity did not also extend to their language. As late as the last decade of the eighth century, the Heian court was busy fighting off such aborigines throughout a large area in northern Honshū which reached from a point north of modern Taga to a point south of modern Akita. Expeditions against these non-Yamato peoples continued into the next century. Today the few traceable remnants of this group of non-Yamato peoples and their languages are represented in Japan solely by the Ainu, who survive to some small extent (fewer than 17,000 of them in 1963) in a few scattered settlements on the northernmost island of Hokkaidō. Their present condition may well be compared with that of the American Indian; they are the objects of curiosity on the part of sight-seers and of occasional serious study by visiting scholars. Their civilization is all but gone and their language survives, apart from a few exceptions, only in a few words which appear from time to time in the otherwise completely standard Japanese speech of the linguistically assimilated Ainu of Hokkaidō.

The Ainu language has been studied ever since the pioneer work of the Anglican missionary John Batchelor (1854–1944). Japanese scholars have only recently completed a large and extremely impressive comparative dictionary of the surviving evidence for the Ainu dialects. Attempts have been made from time to time to find some genetic link between Ainu and Japanese, or to link Ainu with almost every other language on the face of the earth, but the best of these efforts, like the worst, has yet to uncover any substantial evidence. Given the long history of coexistence between Ainu and Japanese along a common border, it is surprising that there is not some greater superficial resemblance between the two, if only of the degree which could be explained by widespread borrowing.

To the very limited extent to which their language survives at all, Ainu speakers are today the only significant exception to the generally uniform permeation of Japanese throughout the four main islands. The only other exceptions which need be mentioned are small numbers of alien Koreans and Chinese resident in Japan, most of whom use the Japanese language more commonly and easily than they do Korean or Chinese, plus small numbers of other foreign residents in Japan. Even if the United States military forces still stationed in various parts of the home islands, legally not even considered resident in Japan, are added to the count of non-Japanese-speaking aliens in the country, the total would still be a tiny one and without linguistic significance.

Given certain surviving dialect differences, then, Japanese as a more or less uniform language is found throughout the four main islands. It has no rivals as the national language, and there are no groups of any size or significance within the country for whom it is not the preferred medium of everyday communication. To an American this may seem to belabor the obvious, but it is a linguistic situation almost unique in Asia, and one which has had and continues to have important consequences for Japan's social and political unity and cohesiveness. To an Indian, for example, faced with the great linguistic diversity of his nation and the tremendous problems of social communalism growing out of it, the linguistic uniformity of Japan is an object at once of great interest and great envy.

The emphasis on universal compulsory public education following the Meiji Restoration helped greatly to unify the linguistic situation within Japan. All such education has now for almost a century been conducted in an officially defined standard language based on what was originally one of the more prestigious varieties of the dialect of Tokyo. This has now become a true national vernacular running parallel to the local dialects where it has not actually replaced them. To be sure, a rural elementary school teacher working in a widely divergent dialect region still often leaves a great deal to be desired in his command of the now standard language of Tokyo. During the hours of actual classroom instruction a serious attempt is generally made to avoid non-standard lexical items and morphology; even so, it is always difficult to escape from the local standard in pitch contrasts and sometimes also in segmental phonological features. Even university lecturers can often be observed teaching largely in the vocabulary, morphology, and syntax of the standard language but with the pitch-contrast system of their own local dialects.

The spread of modern mass communication media in Japan, especially of television since World War II, has now put the standard language within the easy and indeed inescapable reach of everyone. This cannot help but accelerate the spread of linguistic uniformity throughout the country. The rural school child may still be taught in a less than completely accurate approximation of standard Japanese, and in his home he and his family may still make virtually no attempt to speak the standard language. Nevertheless, for an increasingly large number of hours each day he and those around him, both in the classroom and in the home, are exposed to radio and television broadcasts in the standard language. In fact, one of the most convenient ways of identifying the precise perimeter of the standard language is to define it as that variety of Japanese recorded in the pronouncing dictionaries and other handbooks prepared by the state broadcasting corporation for the use of its announcing staff. This gives some idea of the importance that radio and television have both had in the diffusion of the standard of Tokyo speech throughout the country.

Outside of the four main islands of Japan and Okinawa, the Japanese language is still the everyday medium of communication to some extent for about 200,000 Japanese immigrants and their children in Hawaii, approximately the same number on the mainland of the United States, and some 380,000 such persons in Brazil and other parts of South America.

The persistence of the language among the Japanese immigrants and at least among the first generation of their children in Hawaii and Brazil is remarkable. In Honolulu several radio stations broadcast many hours daily in Japanese, both in the standard language by means of recordings and announcers imported from Tokyo, and in the rural dialects, largely Western Japanese, most common among the Japanese immigrants to Hawaii. For the latter the announcers are members of the local Japanese community. The popularity of imported Japanese-language films throughout the state of Hawaii (with English sub-titles, to be sure, but usually so badly done as to make the films all but unintelligible without some knowledge of the language) is another significant tribute to the persistence of the language among the large part of the population of Japanese ethnic origin in the fiftieth American state.

This determined survival of the language in Hawaii and to a lesser extent on the west coast of the American mainland is surprising. Persons of Japanese origin in these areas were subjected to extraordinary hardships during World War II because of their race, and every social pressure that might cause them to abandon the language has been operating on the group with considerable force for many years. Before World War II the Japanese immigrant population in Hawaii and the United States proper supported their own Japanese-language schools for their children. In many cases they also preferred when possible to send their children back to Japan for part or all of their elementary and secondary education. Not the least of the disasters of the war was the internment in concentration camps of the entire population of Japanese ethnic origin in the western continental United States, regardless of their citizenship, and the forced liquidation of their property and all other non-portable assets, usually for a small fraction of its real value. This might have been expected to have produced a stronger reaction against the retention of the language than it actually did. (Curiously enough, the Japanese population of Hawaii was not subjected to this treatment, even after the attack on Pearl Harbor.)

In South America the Japanese immigrant communities have in general been less completely assimilated into the culture and society of their new homes than they have been in Hawaii or on the west coast of the American mainland. In Latin America the Japanese communities have generally tended to show a greater degree of religious conformity to local behavior patterns but a correspondingly small degree of linguistic conformity. Even today visitors from Japan to certain parts of Brazil report that in some Japanese communities there is still absolutely no linguistic evidence, even down to and including street signs, that the site is the new world and not Honshū. This is due partly to the fact that in Latin America the Japanese have been welcomed particularly as pioneer settlers in areas that have not yet yielded to exploration and cultivation by other less industrious groups. Here they often find themselves in a typical frontier situation where they are the only human beings for miles in any direction. This no doubt does much to explain the significantly greater degree of linguistic retention on the part of the Japanese communities there, even sometimes after they manage to advance economically and socially beyond the "boom" or "bust" towns of the Japanese frontier in Latin America.

Despite this amazing spread of standard Japanese, the evidence presented by the survival of local non-standard dialects for a complex earlier dialect distribution in Japan is impressive. The extremely thorough system of compulsory education since the Meiji Restoration has meant in effect that the standard language of Tokyo is now understood by every Japanese in any part of the country. But this does not mean that certain local dialects which are not mutually intelligible with Tokyo speech have completely disappeared from daily use, especially in the home. Apart from school, office, and other public activities, persons in Kagoshima, for example, still use their own local dialect in daily life; this is not only unintelligible to the speaker of standard Tokyo Japanese but is equally unintelligible to persons in the surrounding Chūgoku and Shikoku areas closest to Kagoshima. In the same way, people from Aomori even today in private situations use their own local dialect which is virtually unintelligible to their closest neighbors from outside the Aomori dialect area.

Indeed, if we were to make mutual intelligibility the dividing line between "language" and "dialect," it would be possible to say that in Japan there are still several different "languages" in the sense of a number of non-standard local dialects mutually unintelligible both with each other and with the standard Tokyo speech. To say this, however, would be to obscure the fact that the permeation of standard Tokyo Japanese into all parts of the country has provided a really effective medium of communication. This standard speech now rises above all local dialect barriers. As one result the earlier dialect distribution has been reduced almost to the status of a linguistic curiosity, and one that even now is rapidly disappearing. It is regrettable that in most cases the permeation of the standard language will soon probably destroy what are from the linguist's point of view the most valuable of the local dialects before they have been sufficiently studied along modern lines of research.

In 1909, the same year as the completion of the *Atlas linguistique de la France* of Jules Gilliéron (1854–1926) and E. Edmont, Shinmura Izuru (1876–) began to introduce new European developments in dialectology to Japanese scholarship. Over the next two or three decades a number of important European works on dialect study and dialect geography were translated into Japanese. Many Japanese, inspired by these examples of European scholarship, turned their attention to the study of their own dialects.

A celebrated study of the distribution of Japanese dialects, Yanagita Kunio's *Kagyūkō* (*A Study of the Dialect Forms for "Snail"*), dates from 1927 and is representative of the work of this early period, with its strong influence from pioneer European dialect studies. Yanagita showed that the dialect forms for "snail" are arranged today in concentric circles, with the ancient cultural and political capital of Kyoto at their center; arranged around this point are found in order, among other forms, *dendenmushi*, *maimai*, *katatsumuri*, *tsuburi*, and *namekuji*. This last form is best represented today at two geographical extremes, the Tōhoku region to the northwest of Tokyo and the island of Kyūshū. To these dialect data Yanagita then brought the evidence of historical texts, showing that the form *namekuji*, today surviving only in these two isolated areas on the outermost periphery of this circular system, is historically the oldest of these forms, followed by *tsuburi* and the rest, in the reverse order of their present-day geographical distribution. This famous study is even today often referred to in accounts of the Japanese dialects, and was an early high-water mark for academic interest in such matters in Japan.

The founding of the Tokyo Dialect Society (Tōkyō Hōgen Gakkai) in 1928 was followed by the establishment of many similar organizations, including one of national scope in 1940. Unfortunately, almost all of this work has remained on the level of collecting what appear to be, from the viewpoint of a standard language speaker, quaint or curious items of vocabulary. There have been almost no analytic or descriptive studies sufficiently detailed to be useful in the comparative method or for other linguistic ends. Most Japanese dialect studies, for example, still record the sounds of the local dialects in the standard Japanese *kana* orthography. Hence it is almost impossible for the student attempting to use such records for comparative purposes to get any idea of the phonemic structure of the dialect. Even more frustratingly, many of the studies which have been published record the local dialects not only in *kana*, which would be perplexing enough, but in a combination of *kana* and Chinese characters in much the same way that the standard language is generally written. Hence the use of their data is further complicated by all the difficulties automatically presented by the use of Chinese characters in Japanese orthography, which often renders such records all but useless to the linguist.

In recent years a few notable exceptions have begun to appear. Certain studies produced under the auspices of the National Institute for the Study of Japanese (Kokuritsu Kokugo Kenkyūjo) have employed a workable phonetic transcription, and often include phonemic analysis, even though in the study of closely parallel dialects, such as the Japanese area generally presents, detailed phonetic observations are in most cases of more value than phonological conclusions. Most of their studies, however, still deal only in items of divergent lexical detail. As a result, it often remains difficult to get an over-all picture of the resources of any one of the local dialects.

By way of contrast, one aspect and one aspect only of the modern Japanese dialects has been exhaustively studied and reported upon. This is the system of contrasting high and low pitch levels which most (but apparently not all) of the modern Japanese dialects show. No Japanese term ever seems to have been in common use to designate this phenomenon; the Chinese loanword *onchō* "pitch, tone" has occasionally been used in the past, but by all odds the term most commonly used today is the English loanword *akusento* "accent." Since English "accent" is a matter of stress and loudness differences rather than of relative pitch, the choice of this term was not a completely fortunate one.

Many Japanese scholars and amateurs have devoted themselves to the study of this phenomenon, often displaying amazing energy and undergoing considerable personal hardship to carry on their fieldwork and publication. The most notable of these diligent students of the Japanese *akusento* is Hirayama Teruo, but many others could be mentioned. It is not difficult to speculate why this one particular feature of the surviving local dialects has been studied with such energy, and reported upon in such admirable if often somewhat prolix fashion. Even for non-standard speakers who have mastered the standard language quite satisfactorily in all other respects, the problem of the pitch contrast system often remains a considerable barrier to complete linguistic respectability. Modern Japanese society attaches considerable prestige to the ability not only to speak the standard language but to speak it with an authentic rendering of its pitch system; but this is usually the hardest feature of all for the non-standard speaker. Many Japanese not born, raised, and educated in Tokyo have what amounts to a bad conscience or a lingering sense of uneasy guilt, carried throughout their lives, about their pitch pronunciation. The result is a great amount of self-consciousness in Japanese daily life about pitch pronunciations. This self-consciousness spills over into an intense scholarly interest in the phenomenon, and incidentally results in a large potential market for books on the subject and for pitch-annotated pronouncing dictionaries.

In their studies of pitch phenomena in the non-standard dialects Japanese scholars generally employ an extremely precise but easily understandable system of graphic notation which indicates the relative height of syllables, falls and rises in pitch, and sequences of continuous high or low pitch. But even these precise notations are still almost always used in conjunction, not with a system of phonetic transcription for the segmental units, but with the *kana* syllabary! Given the great diversity in pitch systems reported upon it is almost beyond belief to suggest, as these *kana* transcriptions necessarily do, that in all these divergent dialects the only vowels present are the *a, i, u, e,* and *o* of standard Tokyo, and the only consonants those of Tokyo. One single refinement has been allowed by this *kana*-school of dialect orthography: the *kana* symbols for *k* followed by the five vowels are in many studies used with a new diacritic mark, a small raised circle (known elsewhere in the *kana* system but new for the *k*-symbols), to indicate that the sound in the local dialect is not the velar nasal [ŋ], normally indicated by the *k* symbols with another diacritic consisting of two raised dots, but a simple voiced velar stop. But even this is an almost totally useless refinement, since in all but a few cases the Tokyo velar nasal occurs only in predictable environments. A single statement with respect to the voiced velar stop would generally suffice for any dialect not having this feature.

Again, curiously enough (and the phrase is impossible to suppress in any account of the vagaries of Japanese dialect studies) only the closely related cognate language (not in the usual sense of the term a "dialect") of Okinawa has been recorded and published in the detail necessary to satisfy the needs of modern linguistic science. We are infinitely better informed about the speech of Shuri on Okinawa in all its features—segmental phonemes, pitch contrast system, grammar, and vocabulary—than we are for any of the non-standard dialects of the Japanese home islands.

There are several systems in vogue for classifying the present-day non-standard Japanese dialects. The one presented here is largely that of the Japanese linguist and dialectologist Tōjō Misao (1884–), which appears to have the greatest acceptance among Japanese scholars, but it is by no means the only one possible. This system divides the modern Japanese dialects into three large groups, those of eastern Japan, those of western Japan, and those of Kyūshū. This over-all division has been made largely on the basis of certain striking grammatical and morphological isoglosses which may be summarized roughly in the accompanying table:

Isogloss	Eastern Japan	Western Japan	Kyūshū
"Final" and "attributive" forms of Old Japanese "lower bi-grade" verbs	*kakeru* "hang"	*kakeru*	*kakuru*
"Imperative" forms of "mono-grade" verbs	*okiro* "get up!"	*okii, okiyo*	*okiyo, okiro*
Non-past presumptive verb forms	*kakubē* "should write" *oki(ru)bē* "should get up"	*kakō* *okiyō*	*kakō* *okiyū*
Verbal negatives	*kakanai* "doesn't write" *shinai* "doesn't do"	*kakan, kakahen* *sen, siyahen*	*kakan* *sen*
Perfects of verbal negatives	*kakanakatta* "didn't write"	*kakananda* *kakankatta*	*kakazatta* *kakankatta* *kakanjatta*
Perfects of "quinque-grade" verbs from Old Japanese *-Fu*	*omotta* "thought"	*omōta*	*omōta*
"Exist (of animate beings)"	*iru*	*oru*	*oru*
"Conjunctional" and "adverbial" forms of adjectives	*shiroku*<*shiro-i* "white"	*shirō*	*shirō*
Final and attributive adjective forms	*shiroi* "white"	*shiroi*	*shiraka* (?)
Copula	*da*	*ya, ja*	*ja, ya*
Non-past presumptive copula forms	*danbē, zura*	*yarō, darō, jarō*	*jarō, darō*

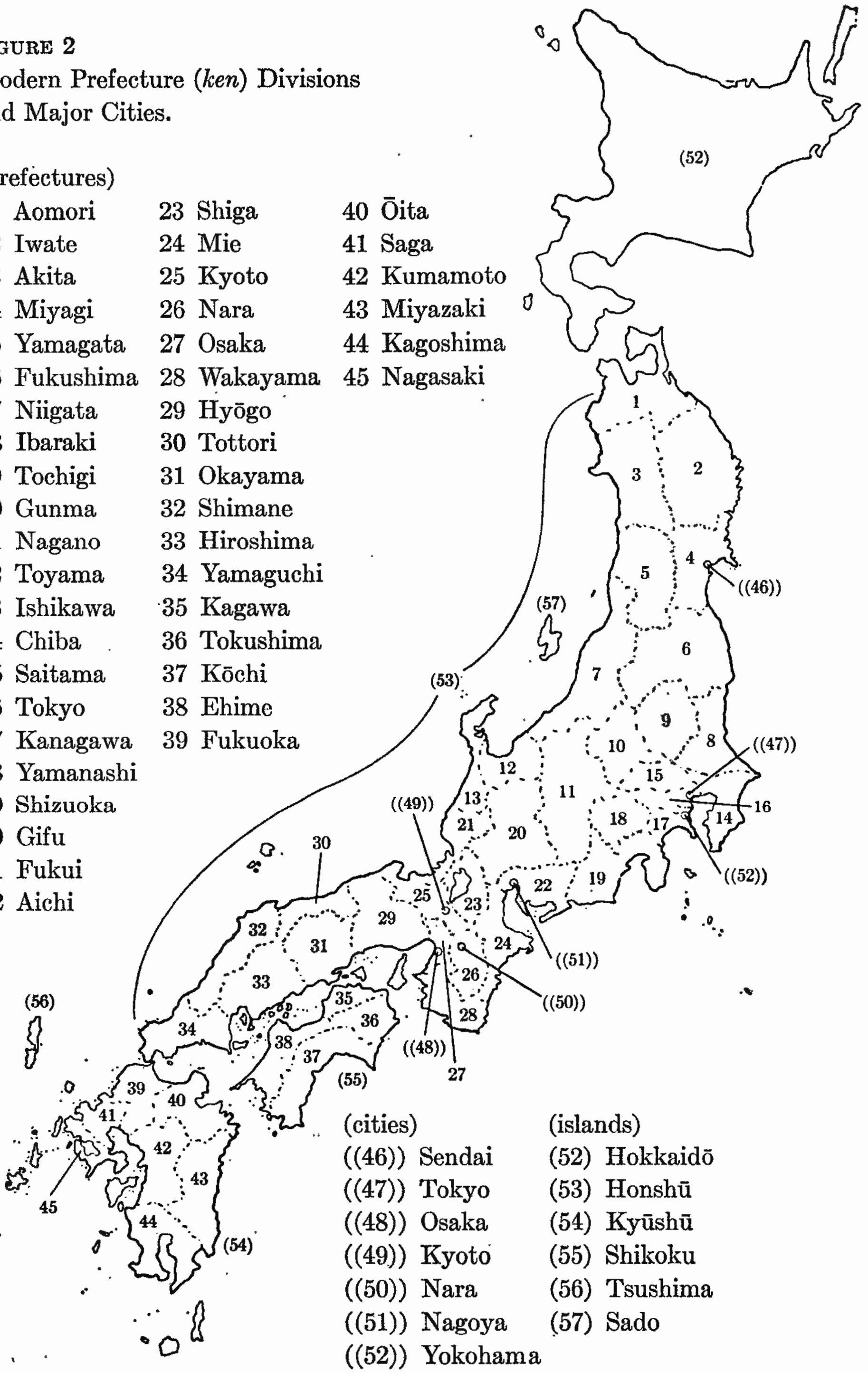
This table shows the chief isoglosses upon which classification of the Japanese dialects is today generally based; at the same time it shows most of the difficulties and shortcomings of the major part of the literature available concerning these dialects. Representing as it does little more than a re-transcription of the probable value of dialect forms transcribed and referred to in the literature in combined Chinese character and *kana* orthography, it can at best give only an extremely gross idea of the many dialect distinctions with which it is concerned. For example, the form *shiraka* in the table above has had to be queried, and shows one of the typical difficulties encountered in interpreting dialect records written in Chinese characters and the Japanese *kana* syllabary. Here the form is written with the Chinese graph *pai* "white" plus, in *kana*, the syllable *-ku*. Are we to understand here *shiraku*, with the change of *-o-* (*shiro-i* "white") to *-a-* that would be regular in many forms in standard Japanese, or does the form here preserve the original *-o-* of the adjective and should it hence be understood as *shiroku?* One additional *kana* symbol would have resolved the ambiguity, as would of course the even more desirable expedient of transcribing the entire form without the intervention of Chinese graphs.

Even though the pitch contrast systems have been extensively studied throughout the surviving modern dialects, such studies have never been combined in any comprehensive fashion with the grammatical and morphological studies out of which such lists of critical isoglosses as the above have grown. The result is that it is impossible to indicate these suprasegmental distinctions with any uniformity in the above table. Other and somewhat different classifications could be and sometimes are made on the basis of pitch system isoglosses alone, or on the basis of the survival or replacement of particular vocabulary items, but the kind of rigorous over-all correlation which information on the segmental phonemes together with other significant features would probably provide is usually missing.

One further drawback of much of the literature is also apparent from the above table. This is the tendency to list dialect features in terms of the traditional morphological classifications of the Japanese verb. These have been reproduced for certain of the items in the table, since the materials are originally presented in this fashion. However, this procedure prejudges the issue of the precise relationship of these dialects to the language underlying the Old Japanese texts before sufficient evidence concerning the exact nature of that relationship has been obtained, much less investigated. If all surviving dialect evidence is eventually shown to stand historically in a one-to-one relationship to the language represented by the texts whose description forms the basis of the traditional accounts of Japanese verb morphology, no great harm will have been done by such methodology; but to present and tabulate the data from the beginning in terms of these categories is to prejudge the issue far too early in the game. At the very least, it makes it difficult if not impossible to use dialect data arranged in this fashion for any critical study of the historical developments in these forms.

In this over-all classification the Eastern Japanese dialects include Shizuoka, Nagano, Niigata, and the areas to their east with the exception of the island of Sado. The Western Japanese dialects include Aichi, Gifu, Toyama, those parts of Honshū to their west, and Shikoku. The Kyūshū dialects include the island of Kyūshū itself and the adjacent small islands extending to the south as far as the Tokara archipelago (Figure 2). Inter-dialectical borrowing, often of consider-

FIGURE 2
Modern Prefecture (*ken*) Divisions and Major Cities.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(prefectures)

1	Aomori	23	Shiga	40	Ōita
2	Iwate	24	Mie	41	Saga
3	Akita	25	Kyoto	42	Kumamoto
4	Miyagi	26	Nara	43	Miyazaki
5	Yamagata	27	Osaka	44	Kagoshima
6	Fukushima	28	Wakayama	45	Nagasaki
7	Niigata	29	Hyōgo		
8	Ibaraki	30	Tottori		
9	Tochigi	31	Okayama		
10	Gunma	32	Shimane		
11	Nagano	33	Hiroshima		
12	Toyama	34	Yamaguchi		
13	Ishikawa	35	Kagawa		
14	Chiba	36	Tokushima		
15	Saitama	37	Kōchi		
16	Tokyo	38	Ehime		
17	Kanagawa	39	Fukuoka		
18	Yamanashi				
19	Shizuoka				
20	Gifu				
21	Fukui				
22	Aichi				

(cities)

((46))	Sendai
((47))	Tokyo
((48))	Osaka
((49))	Kyoto
((50))	Nara
((51))	Nagoya
((52))	Yokohama

(islands)

(52)	Hokkaidō
(53)	Honshū
(54)	Kyūshū
(55)	Shikoku
(56)	Tsushima
(57)	Sado

able historical depth, has in almost all cases greatly complicated the relationships among these dialect areas as well as the relationships among the smaller dialects and sub-dialect groups within each area, and has tended toward less and less clear-cut isogloss distinctions. Japanese dialect scholars express this by saying, for example, that the dialects of the Mikawa region in Aichi prefecture, most of which fall within the Western Japan group, display a considerable number of Eastern Japan features. In the same way, certain of the dialects of the northeastern part of Kyūshū are said to show a considerable number of Western Japan features. Partly this situation reflects wide-scale inter-dialectical borrowing; partly also it simply reflects an unfortunate imprecision in the criteria which up to now have been employed in making dialect classifications.

In general, the Eastern Japan dialect group is characterized by what Japanese scholars classify as the B-type pitch contrast system (see below), or in some cases by what is reported as a complete lack of significant pitch contrasts. In comparison with the dialects of Western Japan, the Eastern Japan group is said to pronounce its consonants "more strongly and longer" and its vowels "more weakly and shorter." These are, of course, purely impressionistic criteria and difficult to pin down with any precision. They seem to be based in most cases not so much on phonetic reality as on certain morphological differences between the dialects. When, for example, an eastern dialect has from the adjective *shiro-i* "white" a form like *shiroku* for the adverbial in the same grammatical context in which a western dialect has the adverbial form *shirō*, or when for an eastern dialect *dashita* "sent out" a western dialect has a form *daita*, traditional treatment of Japanese dialect classification would ascribe all this to the tendency of the eastern dialects to "favor consonants over vowels." The eastern dialects are said also to favor a characteristic emphatic gemination of consonants, as for example in *asukokkara* for standard *asuko kara* "from over there," *koreppakkari* for standard *kore bakari* "only this," *shirokutte* for standard *shirokute* "white (adverbial, continuative)" and *kawappata* for standard *kawabata* "river bank."

Within the Eastern Japan dialect group itself a sub-division into eastern, northern (Ibaragi and Tochigi prefectures and the Kantō plain to their north), and Hachijōjima varieties is generally made on the basis of the following isoglosses which, exceptionally, concern segmental phonemes:

	Eastern, Hachijōjima	Northern
initial syllabic [i]	/i/	/e/
[i] following consonants	[i]	[ï]; in the combinations /si/, /ci/ and /zi/ it sometimes falls together with [u] as [ɯ̈].
[e]	[e̝]	[ẹ]
[u]	[u] or [ɯ]	[ɯ] or [ɯ̈]
diphthongal [ai]	[e̝:], [e̝͜ɑ:], [ai], etc.	generally [æ•]
medial and final *-k*(-) and *-t*(-)	[k] [t]	[ɡ] [d]

The northern sub-group here includes those dialects which the Japanese often refer to as *zūzūben*, "sub-standard speech [which sounds like the noises] *zūzū*"; the speech of this sub-group bears a considerable social stigma in modern Japan. In the Eastern Japan dialect group the speech of all of Chiba prefecture, of eastern Saitama and of central Niigata prefectures shares a significant number of features with this northern sub-group. In Hokkaidō there are two general dialect divisions; the southwest part of the island goes together with this northern sub-group, while the other parts of the island belong to the Eastern Japan dialect group, due to the importation of this dialect by fairly recent settlers from Honshū.

The eastern sub-division of the Eastern Japan dialect group is especially important because it is here that the standard language of Tokyo is to be assigned. In addition to the pitch contrast system which characterizes this sub-group, phonetically the most significant feature is held to be the unvoicing or disappearance of short *u* and *i* under certain circumstances, notably when they occur between voiceless consonants and are followed by *i* or *u* in the next syllable; thus *kishi* "river bank" [kɪši] with voiceless [ɪ] and *tsuki* "moon" [t^{s}ʊki] with voiceless [ʊ], or at times simply [kši] and [t^{s}ki]. Syntactically the use of *kara* for "because" in these dialects is a widespread and significant dialect criterion.

This eastern subdivision is further subdivided into five major areas: (1) Tokyo and Yokohama; (2) the western Kantō plain area, which includes much of the suburban and metropolitan Tokyo area apart from the older downtown region of the city proper; most of Kanagawa; central Saitama and westward; most of Gunma; most of the Izu islands; the eastern portion of Shizuoka; the non-Kōfu basin (the so-called *gunnai*) portions of Yamanashi; and the northern part of Nagano; (3) central and western Shizuoka, the Kōfu basin in Yamanashi, and central and southern Nagano; (4) the central and southern portions of the old Echigo area in modern Niigata prefecture; (5) the Chiba and eastern Saitama area. Here sub-group (2) is considered representative of the "classical" variety of the Eastern Japan dialect group while (1) and (3) have for historical and political reasons been to some extent infiltrated by Western Japan elements; (5) shows certain admixtures of northern elements, and (4), as might be expected, has features which are representative both of Western Japan and of the north.

Each of these five major sub-divisions has its own special features, a complete account of which even in the broad terms in which they appear in the literature would take us too far afield. Sub-group (1) is of course the basis of the modern standard language, to be observed as an original and living phenomenon only in Tokyo, Yokohama, and the regions immediately surrounding these two cities (now virtually one great continuous metropolitan area), but imitated with more or less success throughout the entire nation. Here typically [ai], [oi], and [ui] are maintained intact, in contrast with sub-group (2) where [ai] and [oi] generally shift to [e:], and [ui] to [i:]. For presumptive verb forms (1) has *kakō* "let's write," *okiyō* "let's get up," against (2) *kakubē* and *oki(ru)bē*. Sub-group (2) forms in final *-bē* in this sense bear a considerable social stigma among speakers of group (1). The same is true of the tentative forms where (2) has *kakudanbē* and *kakuzura* for (1) *kakudarō*. The confrontation of (1) *oru* and (2) *iru* for "exist (of animate beings)" has already been mentioned.

Sub-group (1) has a great many Western Japan dialect group borrowings, the result of historical developments during and immediately after the Tokugawa period. Among the more striking ones may be listed *shirō* "white" and other special adjectival forms with original *-k-* shifted to zero before *gozaimasu* "is (respectful)," locutions involving . . . *sasete itadakimasu* "please (lit. I receive your causing me to do . . .)," and . . . *to chiga-u* "(lit.) differs from" in the sense of "is not." In normal conversation the frequent use in (1) of the interjection *nē* and the female sentence-final particle . . . *wa* is striking.

For (2) four further sub-divisions are possible; the third of these, distinguished in general by the use of the tentative *-zura*, includes the dialect of the Izu islands. Here, as in the case of many of the isolated islands off the main Japanese area, the dialects appear to show a great number of important distinctions when studied either from the point of view of the modern standard language or historically in terms of Old Japanese. On Izu, for example, it is reported that in general non-initial medial and final *-k*(-) is [h], initial *w-* is [b], and that /e/ falls together with /i/. The general terms in which these features are reported makes it difficult to use them in more precise studies, but they are suggestive of many of the riches which the Japanese dialects still apparently hold in store.

In (3) a great variety of distinctive morphological, syntactic and lexical features could be cited; from Nagano, for example, *nanakaito* "don't write" (Tokyo *kakuna*) is reported, curiously reminiscent of Old Japanese *na kaki sö*. Some of the dialects in (3) appear to have no significant pitch contrast systems, and there are areas where the Old Japanese distinctions of [ti], [zi], and [di] appear to be maintained intact.

In (4) it is interesting to note that those local areas which show the greatest infiltration by Western Japan dialect forms are not those geographically continuous with the Western Japan area itself but those in the central region. This is due to the fact that in pre-modern times land transportation in this area was less important than marine communication. Here, in general terms, it is reported that initial /i/ falls together with /e/, as also in (5), /yu/ with /yo/, and /u/ with /o/, and sometimes [d] with [r]; /i/ is generally [ï] and /e/ generally [e]. In sub-group (5), in addition to the behavior of initial /i/ already noted, [i] following a consonant tends to become [ï]; /e/ is [ẹ], and [ɛ:] from original *ai* and [ẹ:] from original *oi* are distinguished.

One sub-variety here seems especially important for historical purposes; this is the area where it is reported that "sporadically" medial *-k-* shifts to zero, as in *hatae* "dry field, garden" (Tokyo *hatake*), *kiu* "hear" (Tokyo *kik-u*). This is reminiscent of a far-reaching but poorly understood set of sound changes which in the late Old Japanese period produced important structural changes in the language, and it should be further investigated in this connection.

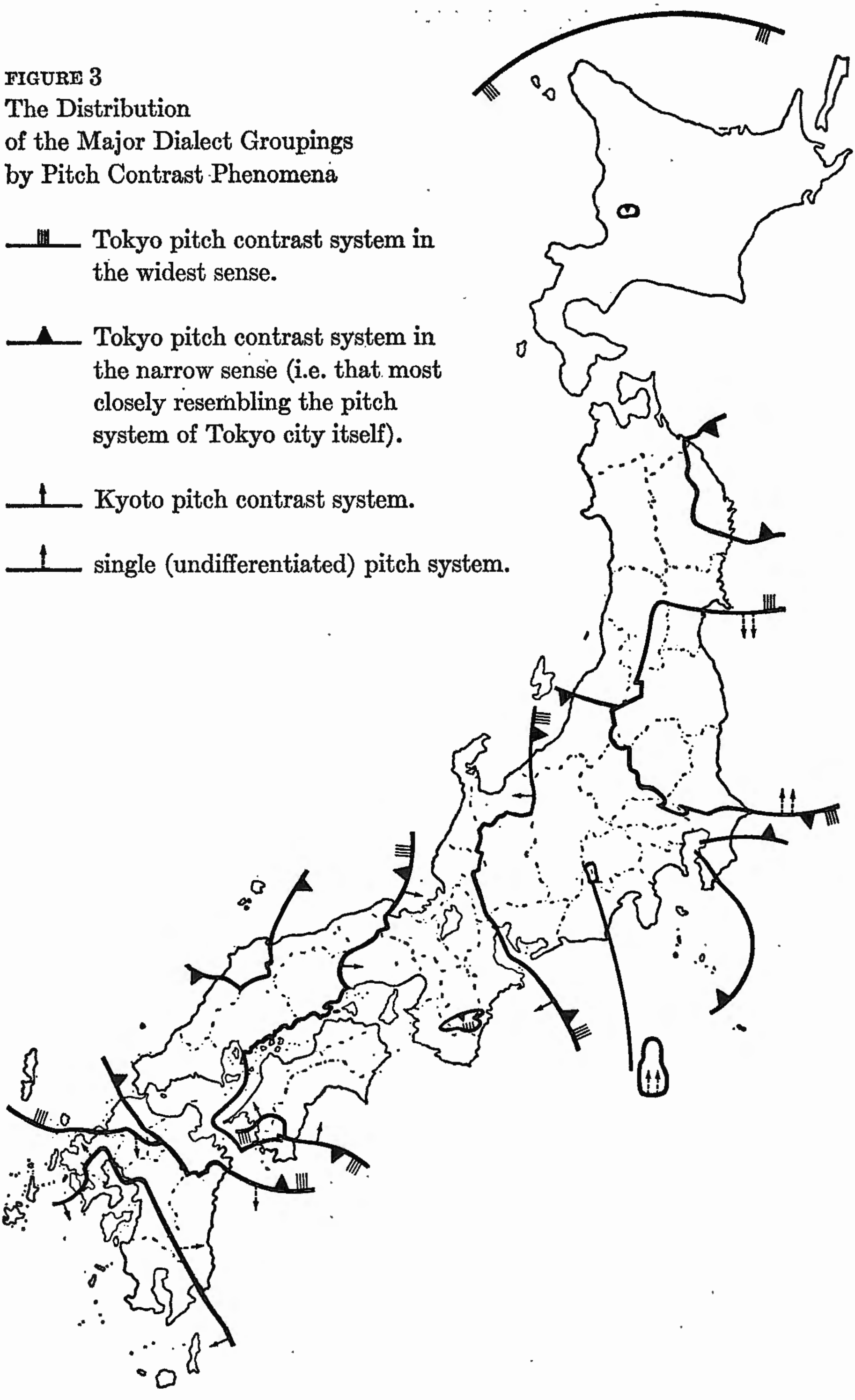
In the northern sub-division numerous morphological and lexical items could again be cited; in one variety original *-g*(-) is regularly reported as a velar nasal, and [we] and [wo] are found; original Old Japanese *si* and *su* are generally found fallen together in a single syllable, as are also original *ti* and *tu*, and sometimes also *Fi* and *Fu* (modern Tokyo *hi* and *fu*), and also *ni* and *nu*. Many varieties of speech here show an important example of what is reported either as pre-nasalization of the vowels preceding original intervocalic voiced stops (original intervocalic unvoiced stops becoming generally voiced) or the insertion of a syllabic nasal before these stops; the phenomenon is particularly widespread in connection with *-d-* and *-b-* and to a lesser extent *-z-*; thus [mãdo] "window" (Tokyo *mado*), against [mado] "target" (Tokyo *mato*). Original *se* is generally reported as [še], [yẹ] is reported, and original /F/ appears in some varieties here to result regularly in a voiceless bilabial fricative [ϕ] before all vowels, [ϕa], [ϕi], etc.; there are also reports of original *kwa* and *gwa* preserved and not fallen together with *ka* and *ga*.

The tiny off-shore island of Hachijōjima appears to have, for its size, an amazing variety of sub-dialect differentiations, with reports of widely varying pronunciations and even structural differences between one tiny village and the next. Thus original Tokyo [o:], which to be sure has itself several origins, is reported from Hachijōjima as varying, from village to village, between [ou], [oe], [au], [ou], and [ou], and one local dialect on the island substitutes both [y] and [d], according to a system not yet described, for original initial /r-/, has [ai] for original /ei/, and [t^{š}] for original /s/!

The Western Japan dialect group is in the popular Japanese mind distinguished above everything else by its fondness for honorifics and other polite expressions. The Japanese say, for example, that people in Kyoto use honorific language even when they are having street brawls. To some extent this popular impression is certainly correct, and reflects certain significant lexical distinctions between this dialect group and the others. In somewhat more precise terms the Western Japan dialect group is further sub-divided into a central Kinki-type dialect area and into a non-Kinki type dialect area. (Kinki is an old term for Kyoto and the area immediately surrounding, once under the direct administration of the imperial court; it may be translated roughly as "the home counties.")

The most important sets of differences recorded between these two sub-varieties in the Western Japan dialect group are to be found in their patterns of contrasting high and low pitch syllables (Figure 3). The Kinki-type dialects have what the Japanese term the A-type pitch system, the others a B-type pitch system more reminiscent of the Tokyo system. The following is a summary of a typical Western Japan A-type pitch system, in comparison with a typical B-type system; it is representative of the commendable precision which Japanese scholars have brought to the study of these suprasegmental

FIGURE 3
The Distribution
of the Major Dialect Groupings
by Pitch Contrast Phenomena


Tokyo pitch contrast system in the widest sense.
Tokyo pitch contrast system in the narrow sense (i.e. that most closely resembling the pitch system of Tokyo city itself).
Kyoto pitch contrast system.
single (undifferentiated) pitch system.

features. Here /á/ is any vowel which begins on a high pitch, /à/ any vowel which begins on a low pitch, and the symbol ⌝ indicates a fall in pitch; [ā] is any high pitch vowel, and [à] any low pitch vowel:

/áa/	[āā] as in *take* "bamboo," *ushi* "cow." In B-type dialects, generally /aa/.
/á⌝a/	[āa] as in *yama* "mountain," *ishi* "stone." B-type generally /aa⌝/, or, locally /aa/.
/àa/	[aā] as in *sora* "sky," *hashi* "chopsticks" *kaku* "write." B-type generally /a⌝a/.
/àa⌝/	[aà] as in *ame* "rain," *haru* "spring," *kake* "write (imperative)." B-type generally /a⌝a/.
/áaa/	[āāà] as in *sakura* "flowering cherry." B-type generally /aaa/.
/áa⌝a/	[āāa] as in *otoko* "man," *take mo* "bamboo also." B-type generally /aaa⌝/ or /aaa/.
/á⌝aa/	[āaa] as *inochi* "life," *shiroi* "white." B-type generally /aa⌝a/, or locally /a⌝aa/.
/àaa/	[aaā] as in *suzume* "sparrow," *sora ga* "sky (+particle)." B-type generally /a⌝aa/ or /aaa/.
/àa⌝a/	[aāa] as in *kabuto* "helmet," *shiroku* "white (adverbial)." B-type generally /a⌝aa/.

Under the Kinki-type dialects is listed, among other varieties, a Kinki dialect proper of which the best known and most important representatives are the speech of Kyoto and Osaka. Traditionally the Japanese have held that these dialects are aesthetically more suited to women's speech than to men's, and they tend to think of them as "weak" and "effeminate" compared to the "bolder" and "more masculine" Eastern Japan dialect group. Such impressionistic views are, of course, more often than not simple *ex post facto* judgments based on observed behavior patterns in the culture or on the content of the literature, rather than on the forms and arrangements of the language itself. In general the Kinki type favors negatives of the *kakahen, kakehen* "doesn't write" pattern (Tokyo *kakanai*) and the non-Kinki type negatives of the *kakan* "id." pattern, the copula *ya* against the copula forms *ja* and *da,* and *sakai* for "because." This *sakai* appears to derive from Old Japanese *sakaFi,* and is probably the same morpheme as a homophonous form for "boundary," modern standard *sakai*. If these two forms are historically identical, as is generally suggested, the semantic development ("boundary, dividing line" > "because") has a close parallel in *aida* "interval, interstice" which is used as "because" in the variety of epistolary style called *sōrōbun*, a development of certain special styles of discourse popular in the Middle and Late Middle Japanese periods. Widespread contraction phenomena are also noted, yielding for example *ningyaka* for *nigiyaka* "busy, gay," and *kocchya* for *kochira* "this way, here."

Kyoto and Osaka are distinct from each other, Kyoto favoring *os* "is" (Tokyo *arimasu*), *dosu* for the copula (Tokyo *desu*), and *kakahen*-type negatives, in addition to a distinctive repertory of respectful verbs in *-har-u*, for example *kakaharu* "write," *miyaharu* "see" (Tokyo *kak-u, mi-ru*). For these Osaka favors *omasu, dasu* and *kakehen*. The Wakayama varieties, which fall under the Kinki-type category, are notable for their pre-nasal articulation of *-g*(-) and *-d*(-) as [^{n}g] and [^{n}d].

The non-Kinki type dialects, which are represented in Gifu, Aichi, Okayama, Hiroshima, Yamaguchi, Shimane, and Tottori prefectures, as well as a few other local regions including the Hakata area on Shikoku, present an impressive variety of differences from the standard language and distinctive developments in terms of Old Japanese too numerous for summary here. In general they prefer *kakan*-negatives and *ja* and *da* copula forms. The dialect of the city of Nagoya comes under this category; it is an important and strikingly different local variety, which the city's many "emigrants" to the rest of Japan have helped to extend to other regions. In Nagoya original /ai/, /oi/ and /ui/ shift respectively to [æə], [ø:], and [y:]; in other non-Kinki type dialects original /ai/ is found as [a:] or [æ:]. Another striking but less important local dialect under this same general category is that of the region around the old religious center of the Izumo shrine in Shimane prefecture, where /i/ is reported as [ï], syllabic /i/ and /e/ fall together, as do original Old Japanese *si* and *su* and original *ti* and *tu*, while original *kwa*, [še], and bilabial [ϕ] from original /F/ are all maintained.

The last large dialect group, that of Kyūshū, may be divided into three main sub-groups along the following lines: eastern, southwest, and southern, or Satsuma and environs. The chief isoglosses which are cited in making this division include the following:

	Eastern	Southwest	Southern (Satsuma)
"Though" (Tokyo *keredomo*)	*kendo*	*batten*	(mostly) *don*
"Because" (Tokyo *kara*)	(mostly) *kii*	*ken*	*de*
Potential	*kakikiru* "can write"	*kakikiru*	*kakiganaru*
Tokyo medial or final *-ki*(-), *-ku*(-), *-chi*(-), *-tsu*(-)	(same as Tokyo)	(same as Tokyo)	*-k*, *-t*

The use of forms of the general type of *batten* (variants reported include *battemu* and *batte*) for "because" is the popular hallmark of these dialects. The eastern sub-division here includes the Hyūga dialect which is reported to be without a pitch contrast system, though in general the dialects of this sub-group have pitch systems of the B-type. The same Hyūga dialect is also unique within this sub-division for maintaining the distinction of original Old Japanese *zi* and *di*, while other dialects in modern Oita prefecture are reported to maintain original Old Japanese *tu* and *du* as [tu] and [du]. In general this eastern sub-division has original /ei/ as [iː] and /ai/ as [eː].

The southwest sub-division contains what Japanese scholars would cite as being the "representative" varieties of the Kyūshū dialect group; *se* and *ze* as [še] and [že], the existence of the sequences /ye/ and /wo/, and the preservation of the original *zi* and *di*, and *zu* and *du* distinctions. Medial and final /ri/ and /ru/ are reported to shift "sporadically" to [i].

The southern sub-division represents by and large the area which was the feudal domain of the Shimazu family during the Tokugawa period. Some idea of the lack of mutual intelligibility of the local dialects with other forms of Japanese can be gained from stories surviving from feudal times in which the local Satsuma dialect is used as a way to prevent military intelligence spreading beyond the borders of the Shimazu fief. We are fortunate to have a workable description of one of the representatives Satsuma dialects which has important applications for the study of historical Japanese phonology, as we shall see below.

The great diversity of dialects in this region deserves further study for the light which it still may throw on the early patterns of settlement in pre- and proto-historic Japan. Kyūshū's geographical situation and its relation to the Asiatic mainland has inevitably made it an important crossroad for Japan's relations with Korea, China, and the outside world of the Asiatic mainland and beyond. The great diversity both among themselves and with standard Japanese which the dialects surviving here present even today should one day be of great significance in re-evaluating the role of the Kyūshū area in early Japanese history.

The present distribution of the Japanese dialects as sketched here in broad outline is, of course, simply a weak modern reflection of an earlier system of far greater differentiation with more rigid lines separating a given dialect or dialect region from another. This we know because of the happy accident that a surprisingly large amount of quite detailed information concerning early dialect areas in Japan is available in the form of 322 poems written in non-standard Old Japanese dialects and included in the *Man'yōshū* collection. Of these poems, found in books 14 and 20 of the text, 165 indicate the local district from which they originated, which in many cases makes it possible to establish certain Old Japanese dialect isoglosses with considerable precision. And, undoubtedly because their recorders recognized that these poems contained non-standard elements which could not easily be associated with (or "generated from") the normally more complicated *Man'yōshū* orthography, with its *kun* and rebus equivalencies, these texts are fortunately recorded almost entirely in simple phonetic transcription, which fact of course adds immensely to their value as linguistic documents.

A good example of these non-standard language materials is poem 3476 from *Man'yōshū* 14:

ubë kona Fa	yes, truly, how my love
wanu ni koFu namo	must long for me
tato tuku nö	as the passing months
nuganaFeyukeba	go fleeting by;
koFusikaru namo	how she must pine for me!

Unfortunately the place of origin of this poem is not identified in the text. Linguistically its most remarkable feature is the representation of some (but not all) instances of standard /r/ with local [n], as in *kona* for standard *kora* "love, sweetheart" and *namo* for *ramu* "how." In the traditional exegesis of this poem *wanu* "I" is also explained as another example of *n* for *r*, but the common Ryūkyū morpheme for the first person is *baa* ∽ *banu*, which makes it more likely that the Old Japanese dialect form *wanu* is to be taken together with these forms, and that all point instead in the direction of an earlier **ban*(*u*). In proto-Altaic the pronoun had distinctive nominative singular forms which contrasted with others for the oblique cases.

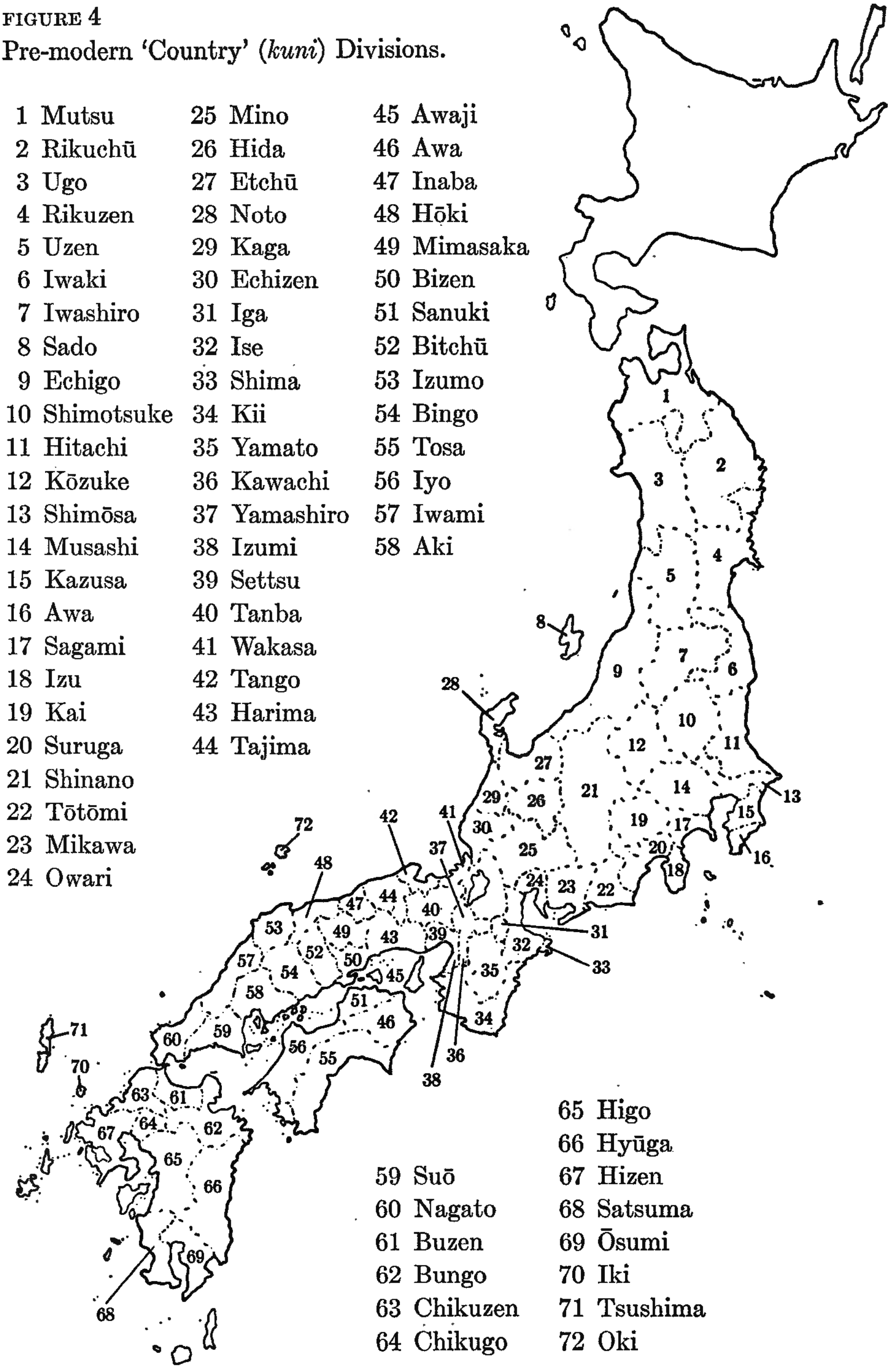
For the first person singular the nominative form **bi* alongside the oblique form **män* must be reconstructed, in addition to a first person plural **bir*. The standard Old Japanese texts have both *wa* and *ware* for "I"; and these forms, taken together with the non-standard *wanu*, probably preserve traces of the original Altaic pronoun paradigm, even though by the time of the earliest Japanese texts it had been much altered by analogic leveling and the generalization of certain forms at the expense of others.

But as is most often the case with these non-standard Old Japanese dialect texts, the most frequent and striking deviations from the standard language are to be found in the vocalization. Thus, this selection has *tato* for *tat-u* "pass"; *tuku* for *tukï* "moon," and *-yukeba* for *-yukëba*. Here as elsewhere in these dialect materials what we know as combining forms in the standard dialect (for example, *tuku-* "moon") seem to have been used as free forms in the non-standard areas; again, the connection between the two phenomena is obscure but probably of importance for the history of the language. The form *nuganaFeyukeba* appears here for standard *nagaraFëyukëba;* in addition to the representation of standard /ë/ with local [e], the vocalization of the first syllable also raises questions, since it is written with the *man'yōgana* character which in the standard-language poems is always read *no*, but which at least in Suruga dialect poems is traditionally read *nu*. Perhaps this indicates that in dialect poems where this character is used in the transcription the sound being indicated was a neutralization of the standard-language /o : : u/ contrast.

The non-standard language pieces in *Man'yōshū* 14 are called *azuma uta*, "eastern poems," while those of book 20 are referred to as *sakimori* "border guard" poems; those with clearly indicated places of origin are about equally divided between these two groups. In the *Man'yōshū* as in other Old Japanese texts the standard language is that of the Yamato culture area of Western Japan, and dialects differing from it are generally referred to as *azuma* < *aduma* "east"; but it is necessary to divide this general "eastern" group of the Old Japanese dialects into at least three major subsections. The first of these corresponds roughly to the modern Kantō region or Eastern Japan; some scholars hold that it extended up to but excluded the modern Tōhoku area while others would include Tōhoku here. In Old Japanese terms it embraces Sagami, Musashi, Kazusa, Shimōsa, Kōsuke, Shimotsuke, and Hitachi (Figure 4). The second includes everything east of the western extremities of the old "countries" of Tōtōmi and Shinano, in

FIGURE 4
Pre-modern 'Country' (*kuni*) Divisions.

1	Mutsu
2	Rikuchū
3	Ugo
4	Rikuzen
5	Uzen
6	Iwaki
7	Iwashiro
8	Sado
9	Echigo
10	Shimotsuke
11	Hitachi
12	Kōzuke
13	Shimōsa
14	Musashi
15	Kazusa
16	Awa
17	Sagami
18	Izu
19	Kai
20	Suruga
21	Shinano
22	Tōtōmi
23	Mikawa
24	Owari
25	Mino
26	Hida
27	Etchū
28	Noto
29	Kaga
30	Echizen
31	Iga
32	Ise
33	Shima
34	Kii
35	Yamato
36	Kawachi
37	Yamashiro
38	Izumi
39	Settsu
40	Tanba
41	Wakasa
42	Tango
43	Harima
44	Tajima
45	Awaji
46	Awa
47	Inaba
48	Hōki
49	Mimasaka
50	Bizen
51	Sanuki
52	Bitchū
53	Izumo
54	Bingo
55	Tosa
56	Iyo
57	Iwami
58	Aki
59	Suō
60	Nagato
61	Buzen
62	Bungo
63	Chikuzen
64	Chikugo
65	Higo
66	Hyūga
67	Hizen
68	Satsuma
69	Ōsumi
70	Iki
71	Tsushima
72	Oki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modern Shizuoka, Yamanashi, and Nagano Prefectures; this accordingly embraces the old Suruga area, about whose dialect we are especially well informed, and the old "country" of Kai. In modern terms it corresponds roughly to what is called Chūbū or "Middle" Japan. The third includes everything east of the western extremities of the old "countries" of Hida, Mino, and Owari, and includes the old Mikawa area; it corresponds to modern Gifu and Aichi Prefectures.

In this first variety of non-standard Old Japanese the combination /ti/ appears to have been pronounced [t^{s}i] or [t^{s}ï], or, according to some authorities, [t$^{\check{s}}$i]; all these phonetic speculations are based on different interpretations of cases where morphemes with standard /ti/ are written with /si/ in these *Man'yōshū* dialect texts. This is generally interpreted as an orthographic device to indicate some variety of affricate pronunciation, apparently on the basis of later developments in the language. The possibility that these writings indicate a simple dialect equivalence of [s] for standard /t/ before /i/ does not appear to have been considered in the literature.

There is also evidence here for confusion between standard /i/ and /ï/; those who include the equivalent of the modern Tōhoku region in this first dialect group see in this an early documentation for the modern [ï] pronunciation which characterizes much of the Tōhoku dialect region, and to this they also assign those cases in the texts where standard /i/ and /ï/ are both represented by local [u]. In other cases standard /e/ is represented in this dialect area by local [a], and standard /ë/ almost always appears as local [e]. This last phenomenon is so regular in the texts that it is possible to speak of it as a clear-cut dialect correspondence rather than as a "confusion" between the two sounds.

In the second variety, represented by the dialects of Suruga and the Tōtōmi-Shinano complex, standard /ö/ and /ë/ often appear to interchange with each other, so that standard *kagë* "shadow" appears as *kagö*, but standard *kötöba* "word" appears as *këtöba*. The replacement of standard /ö/ with local /ë/ is particularly frequent following *m-*, but also appears after *t-*, *k-*, *y-*, and *z-*; the reverse replacement is seen after *r-* and *F-*. Traces of this phenomenon are found even in Heian texts; a poem in the *Kokinshū* has *kekere* for Old Japanese *kökörö* "heart." Similar uncertainty about standard /o/ and /e/ is also seen here, but to a far lesser extent. Perhaps it is most satisfactory to conclude that in these dialects the original Old Japanese distinction between /ë/ and /ö/ was merged in an undifferentiated or neutralized phoneme /Ö/. Suruga often also confuses /e/ and /i/, with *iFi* for standard *iFe* "house." Tōtōmi often confuses standard /o/ and /u/, especially after *t*-, *y*-, and *r*-, with, typically, *yuri* for standard *yori* "from."

The western extremity of this second of the Old Japanese non-standard dialect areas coincides nearly exactly with the modern bundle of isoglosses in segmental features dividing the Western Japanese dialects from those of Eastern Japan (Figure 5), while archaeologically it coincides with the eastern limit for finds of the *dōtaku*, a characteristic bell-shaped ritual object produced during Japan's bronze age. These bronze objects, which are mostly Middle Yayoi in date, represent a unique as well as the most advanced development, both in time and space, of the bronze age in the Japanese islands. The correlation of their eastern limit of distribution with this dialect evidence from the Old Japanese texts is an extremely significant correspondence between linguistic data and archaeological evidence. The eastern limit of the area which practiced wet-rice cultivation in Yayoi times also coincides with this same general line, and it was only later that this continental technique pushed farther east across this isogloss.

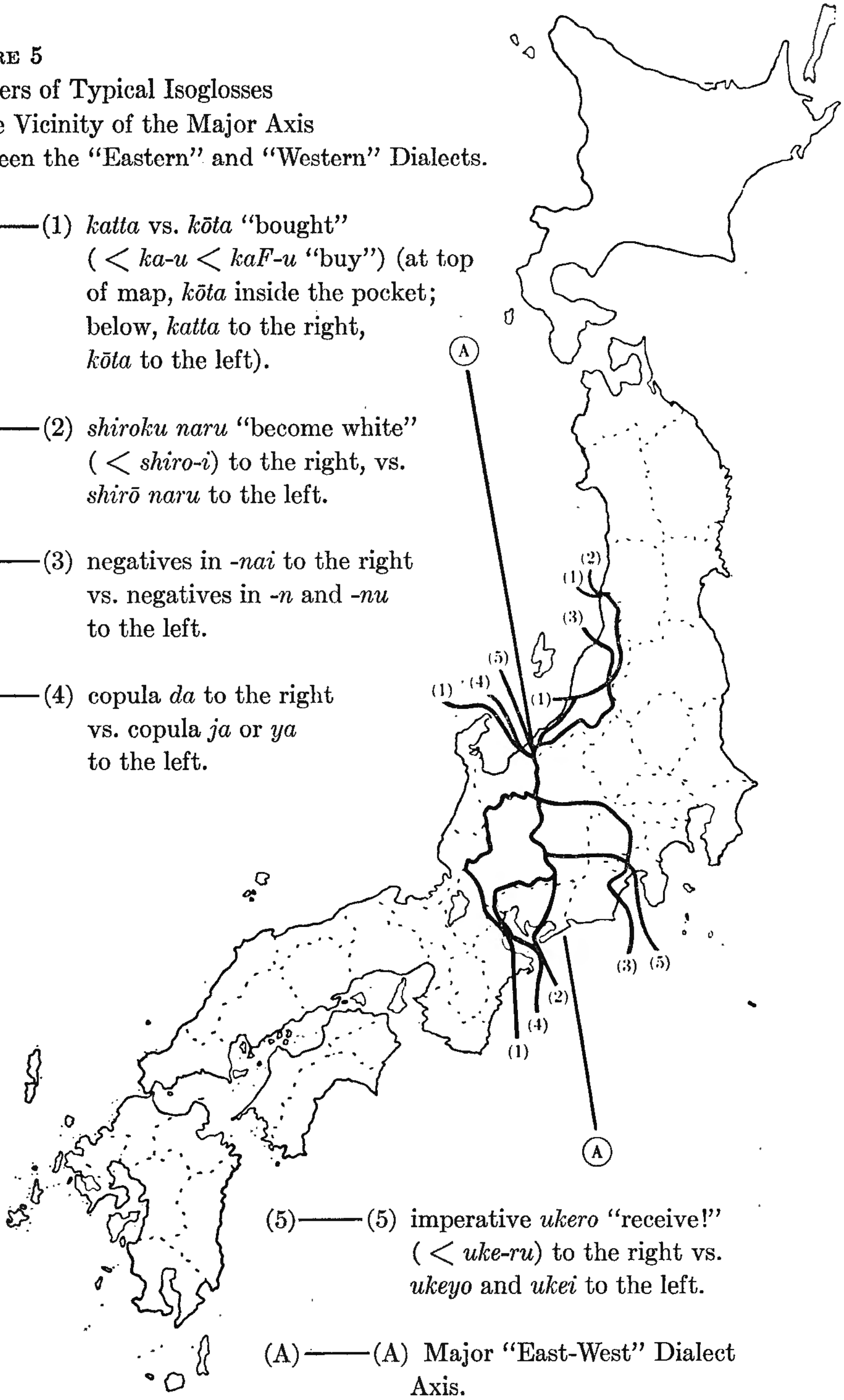
The region partly in the old Suruga area and partly in the adjoining portions of Tōtōmi (all within modern Shizuoka Prefecture) where standard /ö/ and /o/ are often represented by local [ë] and [e] can also be correlated quite impressively with non-linguistic data on early cultural and sociological units in the area, which appears to have had regional coherence as far back as Yayoi times. Its early material culture is well known thanks to the impressive archaeological finds at the Toro site, on the coast near the modern city of Shizuoka, and the structure and evident organization of this site give some idea of the longstanding cultural cohesiveness for which these dialect features also provide supplementary evidence.

Such correspondences between the boundaries of the Old Japanese dialects and Yayoi archaeological data give us considerable confidence in assuming that at least some variety of Old Japanese was the language of the Yayoi culture. The evidence from the Old Japanese texts also helps to show that here modern dialect boundaries represent a continuation of extremely old cultural and sociological divisions.

There is less precise phonetic information available about the third local variety of non-standard "Old Japanese," but here again it is significant that the line which sets this group off corresponds closely to the modern supra-segmental isogloss dividing the Kyoto-type pitch

FIGURE 5

Clusters of Typical Isoglosses
in the Vicinity of the Major Axis
Between the "Eastern" and "Western" Dialects.



(1)——(1) *katta* vs. *kōta* "bought" (< *ka-u* < *kaF-u* "buy") (at top of map, *kōta* inside the pocket; below, *katta* to the right, *kōta* to the left).

(2)——(2) *shiroku naru* "become white" (< *shiro-i*) to the right, vs. *shirō naru* to the left.

(3)——(3) negatives in *-nai* to the right vs. negatives in *-n* and *-nu* to the left.

(4)——(4) copula *da* to the right vs. copula *ja* or *ya* to the left.

(5)——(5) imperative *ukero* "receive!" (< *uke-ru*) to the right vs. *ukeyo* and *ukei* to the left.

(A)——(A) Major "East-West" Dialect Axis.

systems from the Tokyo-type pitch systems, and also with the *katta* vs. *kōta* "bought" isogloss.

The grammatical differences between the non-standard Old Japanese dialects and the Yamato language revealed in these *Man'yōshū* texts are also impressive, and deserve fuller treatment than they have been given. The standard-language contingent morpheme *-u* for attributive verb forms often appears as *-o*, thus *Furo yuki* for *Furu yuki* "the snow which falls" and *Fiko Fune* for *Fiku Fune* "the boat which one pulls." A parallel dialect feature is *-mo* for Yamato *-mu* in the presumptive verbal suffix. Some of the non-standard poems show a negative verb formation in *-naF-* and *-noF-* which may be of historical importance as the ultimate origin of the modern Eastern Japan (and standard language) negatives in *-nai* < *nae* < *naye* < *nawe* < *naFe*. This would make for an extremely neat and long-standing dichotomy between the modern Western Japan negatives in *-n*, from the old standard Yamato *-n+u* forms, and the modern Eastern Japan *-nai* forms from this *-naF-* formation. The problem is once again complicated by our incomplete knowledge of the exact course of the developments centering around the apparent loss of inflectional *-k-* before *-i*, and the relation of these modern *-nai* negatives to the historical forms underlying the literary negatives *-nasi* (conclusive) and *-naki* (attributive). Perhaps the loss of *-k-* here took place through lenition to [χ]; this would provide an attractive possibility for associating the standard *-nak-* and the non-standard *-naF-* negatives through an intermediate **-naχ-*.

The most impressive correlation with modern dialect isoglosses provided by the *Man'yōshū* materials is in the imperatives; dialect forms such as *tukërö* "attach (it)!" and other non-standard "eastern" imperatives in Old Japanese *-rö* clearly show the origin of the modern Eastern Japan imperatives, contrasting with the Western Japan forms in *-yo*.

The Nara gazetteer texts (*fudoki*) contain, *inter alia*, a considerable amount of information about local non-standard dialects and even a few fragmentary notices of what are probably early non-Japanese words. They also document status-orientated dialect cleavages as opposed to purely geographical ones. Any society as rigidly organized as Japanese society has traditionally been inevitably reflects its rigid stratification in its linguistic system, and the language of the Old Japanese period was no exception. Of course, many of the words which these texts give as being the "vulgar" or "folk" equivalents of standard lexical items are also non-Yamato area dialect items in geographical origin.

Among the examples of what are probably early non-Japanese words preserved in the *fudoki* texts the word *Fisi*, recorded as meaning "sand bar, sandy island in the sea" in the language of the Hayato is a famous example. The Hayato < Hayabito were people from the Ōsumi and Satsuma areas, on the extreme tip of Kyūshū farthest away from the center of Japanese culture; the word itself is almost certainly related to proto-Malayo-Polynesian **paṫiγ*, with reflexes in Tagalog *pasig*, Toba-Batak *pasir*, Javanese *pasisir*, all "seashore"; Malay *pasir* "ocean sand," Ngaju-Dayak *pasir* "sand," *pasisir* "seashore," and Hova *fasikăᶜ* "sand." Another *fudoki* fragment records Old Japanese *isa* as a "vulgar" word for whale, going with standard *kujira* < *kudira*. This *isa* is probably also an old borrowing from Malayo-Polynesian, based on a form related to Ngaju-Dayak ᵓ*isi*ᶜ "flesh," from proto-Malayo-Polynesian *ᶜ*iṫi*ᶜ "contents," cf. Tagalog ᵓ*isao̯*ᶜ, Javanese ᶜ*iso*ᶜ "internal organs," from *ᶜ*iṫav*.

Other attempts to locate early non-Japanese elements in the *fudoki* fragments have been less successful. For example, one text preserves the phrase *yato no kami* as a "vulgar" term for "serpent"; (*yato* is given in *man'yōgana* but the following *no kami* is only a presumptive reading on the basis of Chinese *shen* "deity" used as a *kun*-graph following the *man'yōgana* writing for *yato*). Japanese scholars have long associated this with a supposed Ainu word for "swamp," and have seen a further connection between these two and Eastern *yato*, *yatsu* "valley," and with *-ya* as in many modern Tokyo place names such as Shibuya, Setagaya, etc., against the Western and old standard form *tani* "id." But Ainu *yaci* is not "valley" or "swamp" but "mud," and none of the many Ainu words recorded in the sense of "swamp," including *tó* "lake, swamp" and *náy* "swamp; spring (Asahikawa dialect)," or in the sense of "valley," notably *parakót*, specifically "a level hollow or depression deep in a swamp or marsh," appear to have any connection with the Old Japanese form *yato* of the *fudoki* or with modern *-ya*, if indeed even these two are to be related. Once again the presumed evidence for Ainu elements in the Japanese toponymy proves on closer inspection to be largely illusory.

It is extremely tempting to try and find in the existence of these early non-standard dialects within Old Japanese, and in their eventual integration into the expansionist Yamato dialect area, the origin and the motivation for the striking linguistic changes which mark the history of the language from the late Old Japanese period on. Such a thesis becomes if anything all the more appealing when we recall that most of the important changes in the early history of Japanese phonology involved the simplification of the old eight-vowel system, and that the non-standard dialects clearly deviated from the Yamato norm most strikingly in their versions of this Old Japanese vowel system. But as is usually the case in matters of linguistic change, when we have said that, we have in effect only placed the blame for what happened somewhere else in the system.

It is easy to see how increasingly close contacts between a dialect with both /ë/ and /e/ and a dialect in which /ë/ and /e/ were not distinguished could lead to the eventual loss of this distinction in a later third dialect which survived the disappearance of both the earlier varieties; but this does not explain the existence of the less highly differentiated dialect in the first place. Nor, particularly in the case of this Japanese evidence, does it explain why the culturally and socially prestigious standard Yamato language would have rearranged its phonological structure to conform more closely to the models presented by the unimportant, unprestigious local dialects. Ordinarily we should expect quite the opposite to happen. The evidence from the early texts for the dialects of Old Japanese shows that to a great extent the dividing lines between them corresponded to extremely ancient cultural and sociological divisions, which can also be established from other sources; and for the time being at least this is far more significant for the history of the language than any stimulus which such local dialects might have provided for those changes which so greatly affected the later course of the standard language of Yamato.

Chapter 5

Phonology

Thus far we have treated the forms of Old Japanese or of other earlier stages of the language more or less as if they were accomplished facts; but Old Japanese *tökörö*, *Finamöri*, and the like are not of course found directly in the texts in just these terms. When we write *tökörö* or *Finamöri* we are giving overt graphic expression to a set of assumptions about the nature of language and the process of linguistic change, and also to a methodology known as linguistic reconstruction. This is the technique which makes it possible to speak with considerable confidence about earlier linguistic forms not directly recorded in the texts. It is now necessary to see something of the processes by which such forms are evolved, preliminary to a survey of the chief historical developments in the phonology and pronunciation of Japanese.

There are three techniques which have been developed by linguistic science for performing what is commonly known as the reconstruction of the features of languages which are no longer available for direct observation. The need for such techniques arises when languages can no longer be observed directly either because the form in which they are known is a later changed form, or because they have so changed that in fact they no longer exist. These techniques of reconstruction have been developed chiefly by students of comparative Indo-European grammar and have been utilized to their fullest in the study of the Indo-European languages. They are, however, equally applicable to the study of other languages and indeed, their application to language families of strikingly different structure from Indo-European has been of considerable theoretical importance. The three techniques are, roughly in the order of their development in the history of linguistic science, the inspection of written records, the comparative method, and internal reconstruction.

Our knowledge of the phonology of Old Japanese at present comes mainly from the inspection of written records, particularly from the comparison of data in the Japanese written sources with our relatively more extensive knowledge of Middle Chinese phonology. We have already seen above something of what the technique of linguistic comparison reveals concerning the possible genetic relationship of Japanese; such determination of the extent and nature of historical relationship is the earliest application of the comparative method. In addition, however, this same technique involving the establishment of sets of correspondences in detail is an exceptionally valuable one for linguistic reconstruction as well. This is because the underlying assumption of the comparative method is that each correspondence in an item of detail gives evidence for a feature in the original language or the earlier stage of the language of which the languages or linguistic stages being compared are later changed forms. This means that when the detailed correspondences with which the comparative method is concerned are established, they not only provide evidence for the relationship of the languages being compared, but they also provide evidence for the features of the earlier stage behind the comparative data itself. When comparative work involving Japanese is further advanced, and when the Japanese dialects have been studied and recorded in ways which will make it possible to use their evidence for clarifying the phonology of Old Japanese, present views on the subject will without question have to be revised in many matters of detail. The comparative method and internal reconstruction have until now actually played little if any role in the study of Japanese historical phonology, though in the especially critical area of the reconstruction of the Old Japanese vowel system it can be shown that each of these three methods of linguistic science may be applied in turn to the problem.

Indeed, before entering upon a survey of the main features of Old Japanese phonology it is valuable to see what we can learn of this one particular segment of the Old Japanese phonology through each of these methods. If we apply these techniques to the reconstruction of the vowels of Old Japanese, each of them, applied independently of the others, leads to the same conclusions. Viewed in this way, each of the techniques also provides a valuable theoretical check on the procedures and results of the others.

The inspection of written records has long been the chief way in which all questions concerning the earlier stages of a language have traditionally been approached. The comparative method opened a new dimension of study by providing a technique for obtaining information about the earlier stages of languages even when early written records were incomplete or lacking. This, of course, is hardly the case with Japanese. We have already seen something of the extensive tuition in Chinese language and script to which the Japanese subjected themselves, and something of their interest in Chinese phonology as evidenced in the appointment of the *on hakase*. All their phonological knowledge and newly learnt linguistic skills were, to be sure, put to the severest test possible as early Japan faced up to the task of developing systems for writing in Japanese rather than Chinese. Quite apart from all the complications inevitably accompanying the decision to use the Chinese script for this purpose, and apart from the intricacies of the graphic puzzles and rebus-like orthographic riddles which Nara society so evidently enjoyed, even the simple decision to write Japanese words, and later texts, phonetically in Chinese characters used for their sound rather than for their sense made severe demands on all the technical knowledge which the *on hakase* and their Japanese students could bring to bear on the problem.

The problem which they faced was the difficult one which is in English usually and significantly called "reducing" a language to writing for the first time. The trick, to venture a play on words, is to do it without "reducing" the language to the point of no return. It requires technical knowledge of phonetics and phonemics on a level which was not, for example, achieved in Europe until almost the present generation. In this respect the early Japanese with their continental *on hakase* were in quite good hands, comparatively speaking. The Chinese never really excelled in phonetics, though curiously enough they were much better at phonology; still, they had learned a good deal of both from their own masters who had inherited some of the extremely advanced Indic knowledge of these subjects through China's Buddhist connections. At their best, the *on hakase* were the heirs to an extremely rich tradition of phonological study, a tradition infinitely more sophisticated than anything known in Europe at the time and one far in advance of anything Europe would be able to bring to Japan until the first decades of the present century.

But the problems presented by the phonology of Old Japanese, particularly its vocalism, were, we now know, of considerable complexity. Until fairly recently it had been thought that this was not the case, and that Old Japanese, compared with Middle Chinese, had been a language of such phonetic simplicity and even "poverty" that the task of representing its sounds in Chinese characters was mere child's play. Maspero, studying another aspect of the problem, the historical phonology of the Middle Chinese loanwords in Japanese, wrote as late as 1920 of what he called the rudimentary vocalism of Japanese, unfavorable, as he put it, for the conservation of Chinese sounds and for coping with the problems of registering the rich variety of Chinese phonology. Whether or not this was actually the case now seems not nearly as simple a problem as it was thought to be when Maspero wrote in 1920. Karlgren, in his phonetically rather than phonologically oriented reconstruction of the Middle Chinese sound system, appears to deal with eleven distinct vowel qualities, but Martin's phonemic re-analysis of Karlgren's findings has shown that Karlgren's reconstruction is actually that of a language with only six distinct vowels. As we shall see here, the three different reconstruction techniques available to us show that Old Japanese of the same period as Karlgren's Middle Chinese reconstruction had eight distinctive vowels. Hence Old Japanese had a more highly differentiated vowel system than Chinese of the same period. Even more importantly, Old Japanese was almost as rich in distinctive vowel phoneme contrasts as Middle Chinese of the period was in those non-distinctive gross acoustic features which, by and large, the Chinese rhyme-tables record and which Karlgren reconstructed.

This situation rendered the task of the *on hakase* exceedingly difficult. Their problem was first to identify the eight distinctive vowels of Japanese and then to work out some way of writing them phonetically in the Chinese script which, for them, was related to their own language which had only six distinctive vowel phonemes. This meant that it was necessary for them to equate non-distinctive features in their own language with distinctive features in a foreign language, no mean task for any phonologist, whether seventh century or twentieth.

The system which they devised to cope with this problem is what is now known as the distinction between the *kō* and *otsu* varieties of the *man'yōgana*. Most briefly stated, this distinction means that an inspection of the total corpus of Chinese characters used for phonetic transcription in Old Japanese texts shows that such transcriptions fall into two large sets which, by and large, do not interchange with each other. For example, the Chinese character *ku*, Middle Chinese *kuo* "old" is used for the syllable *ko* in such words as *ko* "child" or the *-ko* in *otoko* "man." But the Chinese character *hsü*, Middle Chinese *χi̯wo* "allow," is used for the *-ko* in *hoko* "lance," *mikoto* "deity," etc. The first *ko* is not used in *hoko* or *mikoto;* the second is not used in *ko* or *otoko*. Similar differentiations can be noted for many of the Chinese characters employed phonetically in the early Japanese texts.

This phenomenon was first noticed by Motoori Norinaga, whose findings were followed up around 1798 by his student Ishizuka Tatsumaro (1764–1823) whose own study of the problem did not, however, get into print until 1929. In the meantime Hashimoto Shinkichi (1882–1945) had written about it in 1917 in what was either an independent discovery of the phenomenon or, according to some, a reworking of Ishizuka's elaboration of Motoori's original discovery. Since then there has been a vast bibliography in Japanese; Pletner wrote about it in 1936, in what was probably the first detailed account in a European language, and Pierson mentioned it briefly in volume 3 (1933) and somewhat more extensively in volume 4 (1936) of his 20-volume edition and translation of the *Man'yōshū* (1929–1963), but subsequently appeared to have lost interest in it. Most unfortunately, Masako Yokoyama did not take the phenomenon into consideration in her 1950 description of the *Man'yōshū* verbal morphology; here the distinction is particularly important, since certain verb forms which she treated as homophonous in terms of the modern Japanese vowel system actually had different vowels in different morphemes in the language of the *Man'yōshū*. The result of ignoring these vowel distinctions was something like writing a description of

Old English morphology but always re-working each Old English form into its modern English equivalent, or making up modern English equivalents "according to the rules" in those cases where a form has not survived.

The most important student of the phenomenon was the late Arisaka Hideo (1908–1952), whose work on the problem, which eventually led him into significant studies both of the early Chinese phonological works and of Karlgren's Middle Chinese reconstructions, is now available in a 1957 collected edition of his many scattered papers. Arisaka until his untimely death was probably the greatest Japanese historical linguist of modern times, and his treatment of the early written records of Japanese is an important contribution to world scholarship.

The *kō* and *otsu* distinction, which we shall hereafter refer to as Series A and Series B, means in effect that for three of the five vowels of modern standard Japanese there are double representations in the written records of Old Japanese, corresponding to each of the three modern vowels *i*, *e*, and *o*, and that for each of these three vowels it is hence necessary to reckon not with one but with two vowels in Old Japanese, for a total vowel system of eight distinct phonological units.

The inspection of written records, like the other two techniques of linguistic reconstruction mentioned above, actually tells us nothing about the precise phonetic nature or acoustic quality of the sounds for whose earlier existence it provides evidence. It is always tempting, however, to follow up whatever hints the materials may provide for speculation on the way in which the distinctive elements thus revealed were actually articulated, and Japanese scholars have not been slow to do this. Such guesses on the exact pronunciation of these eight early Japanese vowels abound in the literature and there is little need to repeat them here. Often they simply reveal the direction in which the person making them was looking for a genetic relationship for Japanese. Scholars seeking a connection with the Altaic languages end up with eight vowels that look very much like Mongolian and sometimes even appear to operate with a limited kind of vowel harmony. Scholars looking toward a relationship with Korean find eight vowels which seem to work best in terms of a relationship with Korean. Much of the literature on the Series A and Series B phenomenon attempts to capitalize upon certain limitations on vowel occurrence in the Old Japanese texts to try to demonstrate a genetic relationship with the Altaic languages, but of course such a demonstration, even if possible, would still be less than decisive in establishing genetic relationship.

Arisaka showed his customary scholarship in the care and precision with which he studied the problem of the role of the Series A and Series B *man'yōgana* distinction in Middle Chinese phonology. The complete data are too complex to summarize here and are easily available in the literature; most briefly stated, Arisaka showed that the Series A *man'yōgana* corresponds to the IV *teng* of the Middle Chinese phonological tables and the Series B to the III *teng*. These *teng* are the four horizontal divisions of the Sung rhyme-tables which Martin calls "final-class divisions."

Actually, the exact correspondence between the Japanese Series A and Series B and the Chinese rhyme-table divisions differs slightly in each case depending on the vowel involved. For the two varieties of Japanese *i*, Series A is division IV and Series B is division III. For the two varieties of Japanese *o*, Series A is largely division I with some cases of divisions III and IV, and Series B is scattered among divisions III, IV, and I. Granted these less than completely watertight compartments, the problem becomes that of the original difference between Chinese final-class divisions III and IV and what it tells us about the probable Old Japanese pronunciation of the Series A and Series B vowels. This is essentially a problem in phonetic speculation concerning the pronunciation of the linguistic entities already reconstructed here by the inspection of the written records, rather than a problem in phonology or historical linguistics.

Most recently, Matake Naoshi has attempted to show that much if not all of this "scattering" of the two Japanese series among the various divisions is due to somewhat later shifts within Chinese phonology, which have found their way into the also somewhat late recensions of the commonly used rhyme-tables; he argues that in the original *Ch'ieh-yün* language and in the *Ch'ieh-yün* Urtext the Japanese Series A was regularly and without exception represented by Chinese division IV, and the Japanese Series B by division III.

The III and IV final-class division distinction in Middle Chinese has been elaborately treated in the literature both in Japan and in the West. Y. R. Chao has suggested that "the phonetic quality in question lies in the height (or tension if you like) of the vowel. The beginning of all type III finals has a high or close *i*, the beginning of all type IV finals has a low or open *i*. Before a close *i* the consonant tends to be palatalized . . . before an open *i*, there is no such tendency." Other phonetic interpretations of the same materials are also possible, of course.

The most elaborate treatment, and the only one which takes full cognizance of the Japanese evidence, is that of Tōdō Akiyasu who devotes many pages of his 1957 book on Chinese historical phonology to an attempt to use the Japanese Series A and B distinction to throw light on Middle Chinese phonology. His study takes into consideration all the available materials and secondary literature except Y. R. Chao and Martin, with whose work, however, he does not seem to be unfamiliar. Tōdō concludes that the difference between the Middle Chinese final-class divisions III and IV was a difference in their medial; division III was a weak, relaxed, central variety of -*y*- and division IV a strong, tense, fronted variety of -*y*-. This is to be compared with Y. R. Chao, who posits a high, close medial -*i*- in III and a low, open medial -*i*- in IV, as does also Martin.

Tōdō's treatment, the only one since Arisaka fully to involve the Japanese Series A and Series B evidence with the study of the Chinese phonological tables, provides valuable data, but unfortunately his conclusions are not completely valid because of the essential circularity of his methodology. Assuming the "fact" that Old Japanese had an eight-vowel system and the "fact" that these eight vowels of Old Japanese are sufficiently well known to be described in terms of acoustic phonetics, he then takes these as his point of departure, following the phonetic values now commonly held by most modern Japanese scholars for the eight vowels. With this data he enters the Chinese rhyme-tables; and when he again emerges many pages later he is able to say, in effect, that the Middle Chinese materials show that these vowels not only existed in Japanese but were of the following phonetic shapes, etc., etc.—which unfortunately is precisely the point from which his discussion originally began.

At any rate, it is well to distinguish carefully, as few modern Japanese scholars do, between the inspection of written records as a technique for linguistic reconstruction, and phonetic speculation on the acoustic qualities of the distinctive elements attested by that technique. The two are largely independent of each other. Inspection of written records clearly shows an eight-vowel system for Old Japanese; but this conclusion is reached independently of the Chinese rhyme-tables and of our knowledge of Middle Chinese phonetics and phonology, and we go to these solely for assistance in the totally separate and optional process of speculation about the phonetic nature of these eight vowels.

Japanese scholars today generally use the symbols *o*, *e*, and *i* for the Series A, or *kō* varieties of the three vowels with double *man'yōgana* representations, and the symbols *ö*, з, and *ï* for the Series B, or *otsu* varieties; з is a needless typographical complication for which throughout we substitute *ë*, to give the following eight vowel system:

i *ï* *u*
e *ë* *ö* *o*
a.

Inspection of the written corpus not only reveals in this way the existence of this eight-vowel system for Old Japanese, but it also shows various structurally significant shifts in their distribution during the Old Japanese period. These eight vowels occur in limited distribution patterns, depending upon the date of the text, and in addition there are important over-all distribution patterns here which have yet to be sufficiently studied. There are important differences, for example, in the distribution of the eight vowels in inscriptions which can be associated with the Suiko period, named after the Empress who reigned 592–628; she was the aunt of Prince Shōtoku (573–621), the chief architect of the first advances of the Yamato culture toward political and religious sinicization who served as "regent" for much of her reign. The inscriptions of this period show that the distribution of the two varieties of *o* was extremely limited, so that only the Series A variety of *o* was found after *s*- and *m*- and only the Series B variety of *o* after *t*-, *n*-, *y*-, and *r*-; so also only the Series A variety of *e* was found after *F*- and only the Series B variety of *e* after *k*- and *g*-. For the *Kojiki* materials, the following general statement of the Series A and Series B vowel distributions may be made: the contrast between the two varieties of *i* and *e* was maintained after non-homorganic consonants only, i.e., after velars and labials, and so also with the contrast between the two varieties of *o* which was maintained after non-homorganic consonants only, i.e., after velars and dentals, and also after *m*-, but this last contrast of the two varieties of *o* after *m*- was then already in the process of being leveled out and had disappeared by the time of the *Nihon shoki*. In the later Nara documents scribal confusion becomes evident between the two varieties of *o* following *n*-, *t*-, and *y*-, and between the two varieties of *e* following *k*- and *F*-. By the beginning of the Heian period the distinction between the two varieties of *o* was still being maintained after *k*- but otherwise the eight-vowel system had already been virtually leveled out. By the beginning of the 10th century it had disappeared from the written records; and the vocalism had become essentially that of the five vowels of modern standard Japanese, at least in terms of the distinctive units if not actually of their acoustic shapes.

The comparative method was the greatest single achievement of linguistic science as it developed in Germany in the 19th century. Curiously enough, it has yet to be studied seriously in Japan and in relation to the Japanese language even after almost a century of the vigorous importation of every other possible variety of European science and learning. Almost the only significant exception is the work of Hattori Shirō, who as we have seen has used the methodology of comparative grammar to bring together important data on dialects and related languages from the southern part of the Japanese-speaking area and has even extended these findings into the area of the distinctive Japanese pitch contrasts. His work, however, looms as a great and rather lonely exception in the modern Japanese literature on the Japanese dialects and related languages, where most work continues to be on the level of collecting data far too fragmentary to permit application of the comparative method.

In spite of these limitations, there is fortunately still sufficient data available for a treatment of the reconstruction of the vowels of Old Japanese along the classical lines of the comparative grammarians. The main source is a dialect of the Kagoshima (Southern Kyūshū) area described by William L. Schwartz in 1915. Schwartz was the son of a missionary, born in the area and himself a speaker of the dialect he recorded. His account has an impressive degree of internal consistency and, even though it is simply the work of an interested amateur and a foreigner at that, it is still one of the most substantial records we have of a highly divergent non-standard Japanese dialect. His study is especially rare in the field of Japanese dialect materials because it is extensive enough to include numerous examples, among which it is possible to identify eight main sets of correspondences between this dialect and modern standard Japanese:

(1) Tokyo *a* corresponds to Satsuma *a* (examples will be found among the cognates cited immediately below). (2) Tokyo *u* corresponds to Satsuma *u* (again, examples will be found below). These two sets of correspondences raise no particular difficulties.

The correspondences for Tokyo *e*, however, are of a different order:

(3) Tokyo *e* often corresponds to Satsuma *e: hige* "beard" S. *huge; kame* "tortoise" S. *kame; tane* "seed" S. *sane; eda* "branch" S. *yeda; tsurube* "well-bucket" S. *tsubbe; ume* "plum tree" S. *umme.* But there are also a significant number of cases where (4) Tokyo *e* corresponds to Satsuma *i: kome* "uncooked rice" S. *komi; take* "bamboo" S. *taki; kaze* "wind" S. *kazi; kore* "this" S. *koi; ame* "rain" S. *ami; tsume* "(finger, toe) nails" S. *tsumi; kabe* "wall" S. *kabi.*

In much the same way (5) Tokyo *i* often corresponds to Satsuma *i: tani* "valley" S. *tai; ari* "ant" S. *-ai; buri* "horse mackerel" S. *ui-*; *nigiri* "rice ball" S. *nigii-*. (The *-r-* : : S. *-zero-* correspondence is regular; cf. *kore,* S. *koi* above.) But there are also a significant number of cases where (6) Tokyo *i* corresponds to Satsuma *e: shirami* "louse" S. *shitame; meyani* "sticky secretion, matter collecting in the corner of the healthy eye, especially after sleep" S. *meyane; murasaki* "purple color" S. *murasake; warabi* "edible fern" S. *warabe; nisemono* "fake" S. *nesemono; ebisu* "god of wealth" S. *ebesu.*

In much the same way (7) Tokyo *o* corresponds in many cases to Satsuma *o: neko* "cat" S. *nieko; nebuto* "a boil, a sore" S. *nekuto, nekito, netto; nuno* "cloth" S. *nono; nunoko* "wadded dress" S. *nonoko; soko* "there" S. *suko; myōto* (< **me* + *oto*) "husband and wife" S. *mito, myuto; hito* "person" S. *futo; koto* "fact" S. *kot; makoto* "true" S. *makot.* But there are also cases in which (8) Tokyo *o* corresponds to Satsuma *u: kumo* "spider" S. *kobu; doro* "mud" S. *noru* (this form showing both correspondences); *otōto* "younger brother" S. *otots, otodzu, odotsu; tōrō* "stone lantern" S. *tsuro, tsuru; nentō* "beginning of the year" S. *nentsu.*

Unfortunately Schwartz tells us nothing about the pitch or tone distinctions, if any, in the dialect which he was describing. There is always the possibility that these existed in the Satsuma dialect which Schwartz described, and if so that they correlated with correspondences (3) through (8) above. In modern Japan there appear to be two chief areas in which dialects without distinctive suprasegmental features of tone or pitch are found—a large region on Honshū to the north of Tokyo, embracing modern Fukushima, Tochigi, and Ibaraki prefectures, and another smaller continuous band directly through the central part of Kyūshū. Japanese dialect scholars generally treat these as areas in which earlier pitch distinctions are thought to have become "attenuated" through "contamination" or "careless pronunciation," and suggest that they have reached their present stage of no suprasegmental distinctions through an earlier stage with "ambiguous" pitch or tone distinctions. A more likely possibility seems to have escaped investigators, namely that these two zones, today widely separated from each other, represent instead the now discontinuous survivors of an earlier common area subsequently sundered by the intrusion of several different types of dialects with tone and pitch distinctions. The band of dialects on Kyūshū without significant pitch-contrast systems appears from the dialect maps to lie a little north of the region which Schwartz was describing, but it is certainly close enough to it to encourage us in the tentative assumption that Schwartz was describing one of these no-pitch dialects.

At any rate, in the absence of further evidence from field work, the conclusion which must be drawn from the above data is that it is necessary for correspondences (3) through (8) to reconstruct a total of six distinctive vowel phonemes in the original common language of which both Tokyo and Satsuma are later changed forms. These, together with the two original vowel phonemes necessary to account for correspondences (1) and (2), represent the same total and the same eight-vowel system which it is necessary to reconstruct for Old Japanese on the basis of the inspection of written records.

These correspondences and the reconstructions necessary to account for them may be summarized as follows:

(1) Tokyo *a* :: Satsuma *a*, $< *\mathrm{a}$.
(2) *u* :: *u*, $< *\mathrm{u}$.
(3) *e* :: *e*, $< *\mathrm{e}_1$.
(4) *e* :: *i*, $< *\mathrm{e}_2$.
(5) *i* :: *i*, $< *\mathrm{i}_1$.
(6) *i* :: *e*, $< *\mathrm{i}_2$.
(7) *o* :: *o*, $< *\mathrm{o}_1$.
(8) *o* :: *u*, $< *\mathrm{o}_2$.

(Other correspondences of both vowels and consonants in the sets cited above and in the other materials available in Schwartz's description await further treatment elsewhere, but do not affect this reconstruction of the original vowel phonemes underlying both dialects.)

What is the identity of each of the correspondences (3) through (8) above in terms of the Series A and Series B vowels earlier and independently determined by the inspection of written records? In other words, do the reconstructed vowel phonemes identified above as $*\mathrm{e}_1$, $*\mathrm{i}_1$, and $*\mathrm{o}_1$ correspond to Series A or Series B? And the same question must also be asked about the phonemes written $*\mathrm{e}_2$, $*\mathrm{i}_2$, and $*\mathrm{o}_2$.

We shall see below that in general correspondences (3), (5), and (7) go together with Series A, and that correspondences (4), (6), and (8) go together with Series B, so that *e_1 is original Old Japanese *e*, *i_1 is original Old Japanese *i*, and *o_1 is original Old Japanese *o*, while *e_2, *i_2, and *o_2 are original Old Japanese *ë*, *ï*, and *ö*.

Data in which as here it is possible to correlate reconstruction by the comparative method with the evidence of written records are rare indeed, and the coincidence of the findings of the two methods here is striking.

The last of these three basic techniques of historical linguistics, internal reconstruction, was first elaborated in 1911 by the Indo-Europeanist, Eduard Hermann. It consists, in essence, of applying within a single language the assumptions and techniques of the comparative method by treating cognate morphemes in that language in much the same way that related forms from different cognate languages are treated in the comparative method. More recently it has been further refined as a technique for historical linguistics by Hoenigswald beginning in 1944 and also by Marchand in 1956; the work of the latter on the internal reconstruction of phonemic split is especially pertinent here.

Internal reconstruction is a valuable technique. It provides a way to validate the reconstructions made by the comparative method in language groups with well-documented histories and, by the same token, it affords a means for reconstruction in languages with little known history or with few recorded relatives. Its basic premise is that in any language all the allomorphs of a morpheme are cognate or else suppletion has taken place. If one or more phonemes alternate regularly under any conditions whatsoever with one or more phonemes in the same morphemes, these phonemes must have derived from the same phoneme or group of phonemes, or else suppletion has taken place. In using internal reconstruction Marchand suggests that the the isolated paradigm and the *hapax legomenon* cannot be used, and he suggests also that alternation can be accepted as a proof of split only when the alternation occurs under the same conditions in combination with at least three morphemes or if the morphophoneme in question itself occurs in at least two morphemes.

The possibilities inherent in the application of internal reconstruction to Japanese are still largely unrealized; here we shall see something of what internal reconstruction can reveal about the vowel system of Old Japanese, but other applications of the technique deserve separate treatment elsewhere. Interestingly enough, Motoori himself was not unfamiliar with the principles of internal reconstruction, though of course he lacked an understanding of the theoretical basis upon which it was developed in European linguistic science. But he was essentially operating in the terms of this technique when he concluded that although Old Japanese *ye* and *yi* are not represented by individual signs in the *kana* syllabary, it was necessary to postulate their earlier existence on the basis of such forms as *oi* < **oyi* going with *oyu* "grow old" and *ae* < **aye* going with *ayu* "resemble."

The chief materials for internal reconstruction of the Old Japanese vowel system are to be found in a group of morphemes which in modern Japanese display morphologically-determined alternation in composition. Martin describes this group of morphemes as follows: "There are a number of types of phoneme alternation which occur sporadically between Y [i.e. Yamato, or native Japanese, not Chinese loanword—RAM] morphs . . . a morph ending in one vowel is in complementary distribution with a morph ending in a different vowel but otherwise identical in shape. The basic form is the more common morph or the one which occurs as a word uncompounded with other morphs (except for the [pitch] accent); from this 'basic' form the alternant shape is, of course, not predictable except by listing the words with which it occurs. When it does occur, the alternant shape is usually initial in compounds but these must be listed individually."

Martin arranges the group of morphemes in question under ten or eleven sets of vowel alternations, depending on how one counts and upon which is taken as the basic form. From among these sets, only three fulfill the requirements set by Marchand for data for internal reconstruction. They are, in order, (1) *e* : *a*, (2) *i* : *o*, and (3) *o* : *a*. It is under these three sets of alternations that data relevant for internal reconstruction are found. This does not mean that the other sets showing this kind of alternation are without importance for the history of Japanese. For example, under *i* : *u* there is the isolated pair *kutsuwa* "a horse's bit" and *kutsuko* "muzzle (for horses, cattle)" going with *kuchi*, Old Japanese *kuti* "mouth." This is a particularly valuable set because our knowledge of Japanese archaeology makes it possible to be fairly precise about dating the introduction of such items of material culture into Japan. Horses were imported from the Asiatic mainland at an early date, but they were probably not ridden in Japan in a way that would require the use of a bit much before the beginning of the fifth century. Interesting and valuable as such isolated items are, however, only the three sets summarized above provide satisfactory data, both in quantity and quality, to allow the application of the technique of internal reconstruction.

Examples of each set of vowel alternation follow; they are neither exhaustive nor representative of all stages of the language and are here cited in modern Japanese except where a reference to an earlier stage in the history of the language is necessary:

(1) *e* : *a*. *sake* "rice wine," *sakaya* "sales place for id.," *sakazuki* "cup for id."; *ue* "topside," *uwagusuri* "ceramic glaze," *uwagi* "overcoat" (< **uwe* < **uFe;* this morpheme is also to be connected with the element *uma-* in *umabito* "nobleman," with the consonantal variation *-w-* and *-m-* also known from other words, compare for example *mi-zu* "water" and *i-do* < *wi-do* "well"; confusion of this *uma-* with the totally unrelated morpheme *uma* "horse" probably accounts for the stories according to which Prince Shōtoku was born in a stable (*umaya*), a rationalization which must have been devised to explain the first element in his childhood name Umayado); *ame* "rain," *amado* "rain doors," *amakaze* "wind which warns of a coming rainstorm" (cf. *amekaze* "wind and rain"); *tsume* "finger-, toe-nails," *tsumasaki* "tiptoe, a toe"; *kane* "metal," *kanabashi* "metal chopsticks"; *yone* "rice," *yonamushi* "rice insect pest"; *kaze* "wind," *kazamatsuri* "wind festival," *kazashimo* "down wind"; *koe* (< **kowe*) "voice," *kowadaka ni* "in a loud voice"; *ie* "house," *-ya* "shop" (as in *sakaya*), *yanushi* "master of the house."

Haguenauer, who has made the most elaborate study of these forms to date, in addition notes a few comparatively rare cases in early texts where this same type of alternation is found in final position in a morpheme not in composition, as for example *fune* "boat," *to funa* "ten boats"; he also notes the many cases in the modern language where the same morpheme also appears in composition without the alternation but with a different meaning for the resulting compound; thus *sakezuke* "pickled in rice wine" against *sakazuki* "wine cup," etc. (Note also that here internal reconstruction makes it possible to reconstruct the **-w-* of the earlier forms **uw-* and **kow-* for *ue* and *koe* on the basis of the special allomorphs which they have in composition, and that these same earlier forms are also attested by the written records.)

(2) *i* : *o*. *ki* "tree," *kokage* "shade," *kodachi* "ticket"; *hi* "fire," *hotaru* "firefly," *hono'o* "flame"; *ine* "rice," *yone* "id." (cf. immediately above; *i-* in *ine* is an old zero-grade from **yi-* > *i-* going with the *o-*

grade in *yo-*, parallel to **yi-* > *i-* and *yö-* "good"); *niki* "gentle, soft," *nikoge* "pinfeathers"; *ki'iro-i* "yellow," *kogane* "gold"; *kishibe, isobe* "on the shore or beach." (The last two forms raise other problems and involve other historical considerations, but are valid here for internal reconstruction.)

(3) *o* : *a*. *shiro-i* "white," *shiraga* "grey, white hair," *shiraha* "white teeth," *shiraha* "naked sword," *shiraha* "white feather," *shirahada* "leucopathy," *shirahagi* "a decorative flowering plant of the clover group (*Lespedeza tomentosa*)"; *iso* "beach, surf," *isago* "sand"; *hiro-i* "broad," *hirak-u* "open"; *kuro-i* "black," *kura-i* "dark." (Martin considers this last an etymological resemblance of a type which he does not include in his descriptive treatment.)

The alternation in *shiro-i* "white" is particularly important because it is possible to cite a parallel alternation in what is probably a cognate Altaic root, by comparing Mongol *široi*, Middle Mongol *širo'ai* < **sïrugāi*, "earth, dust, powder, pollen" (cf. Evenki *si̯rugī̯, si̯rgī̯* "sand, sandbank in a river") and its doublet forms Mongol *širaγu, širaγui* also meaning "earth, dust, powder, pollen." The Mongol *-o-* : : *-a-* set here is probably to be compared directly with the *shiro-* : : *shira-* alternation.

Let us sum up. Since by the assumptions of the technique of internal reconstruction each of these sets of alternates is evidence for an original phoneme in the language, we must on the basis of these data reconstruct two varieties of *e* for early Japanese: that variety which did not take part in this type of morphological alternation and that variety which did. In the same way, two varieties of *i* and two varieties of *o* are necessary to account for the data, so that once more and for the third time we have here established the eight-vowel system for Old Japanese already independently attested by inspection of written records and by the comparative method.

Schwartz records forms parallel to certain of these morphological alternants in his Satsuma dialect; hence we can see that the process is common to both modern Tokyo and Satsuma and must be considered to have been operative in the common original from which they descend. Thus Schwartz lists *inter alia* the following: *kanadoka* (glossed with standard Tokyo *tetsubin*) "iron tea kettle"; *takanbach* (glossed with *take no kogasa*) "small bamboo parasol," cf. S. *taki* "bamboo"; *amage* (glossed with *amagoi*) "prayer for rain," cf. S. *ami* "rain"; *sakadai* (glossed with *sakadaru*) "rice-wine cask," *sakamoi* (glossed with *sakamori*) "a drinking bout"; *kazefuki* (glossed with *kazefuki*) "blowing of the wind," cf. S. *kazi* "wind"; and *tango* (glossed with *teoke*) "hand bucket," cf. S. *che* "hand."

The same alternation is also attested, often for identical morphemes, in the earliest Old Japanese texts written phonetically in *man'yōgana;* for *sakë* "rice wine" the *Man'yōshū* frequently has the combining allomorph *saka-*, as well as *ko-* for *kï* "tree, wood," *ho-* for *hï* "fire," *kamu-* for *kamï* "god, high ranking person," and *tuku-* for *tukï,* modern *tsuki* "moon." The allomorph *sira-* for *siro-si,* modern *shiro-i* "white" is also frequently attested in the *Man'yōshū.* Other allomorphs such as *uFa-* for *uFë* "topside" and *tuma-* for *tumë* "finger-, toe-nails" are attested in the reading tradition but not directly in the text itself, since they are written in Chinese characters used for sense rather than for sound. Hence only the tradition of how the text is to be read here gives evidence for their precise phonetic shape. This list of early instances of the alternation could be considerably increased by references to other texts apart from the *Man'yōshū.*

Another application of internal reconstruction which may be made in passing further demonstrates the early existence of two distinct varieties of Old Japanese *i.* The presence in the texts of a large number of doublets with modern (-)*ki* in one member and modern (-)*chi* in the other is evidence for an earlier Old Japanese distinction between *i* and *ï*, so that an original *(-)*k-* in a given root followed by *i* or *ï* developed into (-)*ki-* in the one case and into (-)*chi-* in the other. Thus, *saki, sachi* "fortunate" (cf. *saiwai* "id."); *fuki* "border or edge on the hem of a quilted garment (made by folding over and sewing the lining onto the outside)," *fuchi* "edge, verge, side, margin"; *oki* "offing," *ochi* "far distant time or place"; *tsuki* "mud," *tsuchi* "land"; *taki* "waterfall," *tachi* "rise up (deverbal from *tatsu* /tat-u/)"; *soki* "depart (deverbal from *sok-u*)," *sochi* "that over there; you"; *kuki* "a cave in a mountainside; also, the mountain itself," *kuchi* "mouth"; *hiki* "draw out (deverbal from *hik-u*) (cf. *hiQ-*, one of the special consonant-base verb compounds used as an intensive prefix in the modern language, as in *hikkom-u* "draw back," *hikkos-u* "move," *hippar-u* "pull," *hissage-ru* "brandish in the hand"), *hichi* in *hichikudoi* "extremely"; *shiki* "flourishing (deverbal from *shik-u*)," *shichi* in *shichikudoi* "verbose"; *muki* "bend toward (deverbal from *muk-u*)," *muchi* "term of respect for divine persons"; *noki* "leave behind (deverbal from *nok-u*)," *nochi* "later (in time or space)" (cf. the several instances of word-play on *nöti nö Fotökë* "the Buddha of the later ages" and verb forms from *nök-u* "leave behind" in the *Bussokuseki* poems).

Coincidentally, the comparative method also shows clear evidence for this same *i* and *ï* distinction in Old Japanese: compare Tokyo *iki* "breath" : : Shuri (Okinawa) *"i'ici*, Tokyo *kimo* "liver, gall" : : Sh. *cimu* on the one hand with Tokyo *kinoha* : : Sh. *ki'inuhwa'a* "tree leaf" on the other. Here it is also necessary to reckon with two varieties **i* and **ï* on the basis of these correspondences, one of which gave Tokyo *ki* corresponding to Sh. *ci*, the other of which gave Tokyo *ki* corresponding to Sh. *ki*.

A final coordination of the above data and methods would show what the written records tell us about the vocalism in those particular morphemes which show the two sets of correspondences for modern Tokyo *i*, *e*, and *o* in Satsuma (the comparative method) and which also participate in the significant cases of morphological alternation (internal reconstruction). One main direction of such an inquiry was earlier pointed out by Hashimoto and following him Arisaka. They noted as significant the fact that it was the Series B *man'yōgana* graphs which were generally used to record the alternating vowels in the noncombining forms of those morphemes which participate in the morphological alternation; they noted this particularly for *ki*, Old Japanese *kï* "tree, wood" and *sake*, Old Japanese *sakë* "rice wine." Unfortunately the written records are not explicit enough to do more from this point on than indicate the general accuracy and over-all significance of Hashimoto's and Arisaka's observation. At the same time they demonstrate the perplexing muddle in which they have been left by textual transmission through later periods of sound change. As noted earlier, the written records show that generally the correspondence Tokyo *e* : : Satsuma *e* goes with Old Japanese *e*, and that Tokyo *e* : : Satsuma *i* goes with Old Japanese *ë*. The first set, however, is by no means as clear-cut in the written records as the second and there is considerable evidence for early shifts between the two. Indeed, in some cases evidence may also be cited which directly contradicts Hashimoto's and Arisaka's indications.

The problem is further complicated by the limitations observed in the texts on the distribution of Old Japanese *i* and *ï*, *e* and *ë*, and *o* and *ö* after certain consonants, which means in effect that in many of the correspondences in cognate morphemes between Tokyo and Satsuma the critical phoneme is found in an environment in which the *i* / *ï* or other parallel Old Japanese vowel distinctions could not be observed in the texts even if originally present at an earlier stage of the language.

It is worthwhile in this connection to note that both the comparative method and internal reconstruction show a far less severely limited distribution for *ï*, *ë*, and *ö* than do the *man'yōgana* and other written materials. Thus, internal reconstruction and the comparative method show the *e* / *ë* distinction not only following Old Japanese *k*-, *F*-, and *m*-, but also following *n*-, *r*-, *z*-, *t*-, and *w*-, and perhaps also after *s*-. But by the time of the earliest texts this earlier, more evenly distributed system had already been considerably upset. These apparent discrepancies between the materials provided by written records and the results of the other methods of reconstruction stem partly from later problems in the transmission of the records; they are also due in part to philological problems in the interpretation of the texts themselves. Even what appear to be the most matter-of-fact data to be gained from the inspection of written records, namely the distribution of the Series A and Series B sets of vowels with respect to the Old Japanese consonant system, have been called into question recently by Mabuchi Kazuo, who has suggested that the *man'yōgana* also shows the *o* / *ö* distinction after the zero (or /'/) initial, as well as after *F*, and the *i* / *ï* distinction after *s* and *z*. These finds, if generally accepted, would considerably alter the account of Old Japanese phonology given here, which by and large follows the more generally accepted doctrines of Japanese scholarship. Still, the philological data which Mabuchi cites in support of his thesis, taken together with the evidence from the comparative method and internal reconstruction, make it clear that to limit ourselves solely to the patterning revealed in the traditional interpretation of the *man'yōgana* is to elect to work in perhaps unnecessarily narrow confines.

In terms of the methods of reconstruction employed above it is possible to speak of at least the following consecutive stages in the development of the vocalism of Old and late Old Japanese:

(1) Pre-Nara. An eight-vowel system with the vowels in virtually unrestricted distribution, shown by internal reconstruction and the comparative method.

(2) Early Nara. An eight-vowel system, with restricted distribution patterns, shown by inspection of the written records of, for example, the *Man'yōshū* and *Kojiki.*

(3) Nara. An eight-vowel system, with further restricted distribution patterns, shown by inspection of the written records of, for example, the *Nihon shoki.*

(4) Pre-Heian. A six-vowel system, with the *o* and *ö* distinction surviving only after *k*-, shown by inspection of the written records.

(5) Heian. By and large the modern five-vowel system.

Still earlier stages may also be detected in other written records, notably the Suiko period inscriptions already referred to, which consist mainly of early Japanese personal and place names phonetically transcribed in *man'yōgana;* if these are to be taken into account then immediately before (1) Pre-Nara we should probably speak of (ii) Suiko, with the vowel system *i, u, e, ö, o,* and *a,* and preceding this, (i) Pre-Suiko, with *i, u, ö, o,* and *a,* in which later *ia* > *e, ai* > *ë,* and *öi* > *ï*. Finally, if the evidence of the *Wei chih* transcriptions and of the *man'yōgana* cited above concerning the possible ultimate origin of early *o* (or *ö*) in a still earlier *ai* is to be allowed, this Pre-Suiko stage itself would then be preceded by a still earlier one with the symmetrical four-vowel *i, u, ö* (or *o*), and *a* system. The positing of these earliest stages is at present completely based on written records, but the possibility of relating them with other methods of reconstruction should be investigated.

The language of the early Nara period, then, had two varieties of syllables, those consisting of one of the eight vowels (*a, i, ï, u, e, ë, o, ö*), and those consisting of consonant followed by vowel (*ka, ki, kï, ku, ke, kë, ko, kö,* etc.). If, following Hattori and other modern Japanese phonologists, we assume that all modern Japanese syllables in initial vowel without preceding consonant actually begin with a phonological initial laryngeal element /'/, there is then no reason not to read this element back also into Old Japanese, thus giving only one type of syllable for that language too, *'a, 'i, ka, ki, kï,* etc. All Old Japanese syllables ended in a vowel, and there were no syllable-final consonants; even in fairly early texts, however, contractions soon lead to the sporadic dropping out of vowels, perhaps through an intermediate state with a voiceless vowel, and the resultant appearance of such consonants as *s* in syllable final position as well, as for example in the contraction *össaka* from *ösisaka* (place name). This is allied to the eventual addition of a new phoneme to the above inventory, the syllabic nasal -*n*, which arose somewhat later through various processes which are considered in more detail below.

The Old Japanese syllabic inventory, if we base our observations for the moment solely upon the evidence of written records, comprised the following combinations of the eight vowels with thirteen consonants; for the consonants the transcription used gives a rough indication of the principal allophones assumed for each, and only *F*, which is reconstructed as a voiceless bilabial fricative, needs special notice. The comparative evidence appears to indicate that this *F* goes back to an earlier [p], and this superficially at least fits in well with what might be termed a "general Altaic" pattern of development.

a	*i*	*ï*	*u*	*e*	*ë*	*o*	*ö*
ka	*ki*	*kï*	*ku*	*ke*	*kë*	*ko*	*kö*
ga	*gi*	*gï*	*gu*	*ge*	*gë*	*go*	*gö*
$t^{s}a$	*si*		$t^{s}u$	*se*		$t^{s}o$	$t^{s}ö$
$d^{z}a$	*zi*		$d^{z}u$	*ze*		$d^{z}o$	$d^{z}ö$
ta	*ti*		*tu*	*te*		*to*	*tö*
da	*di*		*du*	*de*		*do*	*dö*
na	*ni*		*nu*	*ne*		*no*	*nö*
Fa	*Fi*	*Fï*	*Fu*	*Fe*	*Fë*	*Fo*	
ba	*bi*	*bï*	*bu*	*be*	*bë*	*bo*	
ma	*mi*	*mï*	*mu*	*me*	*më*	*mo*	*mö*
ya			*yu*	*ye*		*yo*	*yö*
ra	*ri*		*ru*	*re*		*ro*	*rö*
wa	*wi*			*we*		*wo*	

A thoroughly phonemic treatment of this syllabary would probably require rearranging the consonants slightly, since [s] and [z] would be treated as allophones of dental affricate phonemes $/t^s/$ and $/d^z/$ before the high vowels *i* and *e* respectively. Each of the affricate phonemes $/t^s/$ and $/d^z/$, which parallel the dental stop phonemes /t/ and /d/, would then be a single phonological unit, not a cluster, and if necessary this aspect of their structure could be pointed out by using instead unit symbols such as /T/ and /D/. Japanese scholars generally treat these two affricate phonemes as clusters of [t] + [s] and [d] + [z], but such a treatment violates their own canon of syllabic patterning for Old Japanese according to which the language had no consonant clusters. By so doing they end up with a consonant inventory of thirteen, *k, g, t, d, s, z, r, n, F* (which they often prefer to write ϕ), *b, m, w,* and *y* (often written *j*). A phonemic treatment also produces a total of thirteen, but the inventory is different: /k, g, t, d, t^s, d^z, r, n, F, b, m, w, y/. At any rate, in all the citations of Old Japanese forms in this book the problem is obviated by citing the fourth and fifth lines of the table above uniformly as *s* or *z* + *a, i, u, e, o,* and *ö*. In terms of the above syllabary, the *Kojiki* has 88 types of syllables and the *Man'yōshū* and *Nihon shoki* have 87, since in their texts the distinction between *o* and *ö* after *m* has already been lost.

All this is based on Arisaka's original and long-accepted formulation for the Old Japanese pronunciation of the syllables resulting in modern *sa, shi, su, se,* and *so;* more recently Mabuchi Kazuo has challenged this entire theory. He attempts instead to show from various kinds of written records that what in the table above are written [tˢa si tˢu se tˢo tˢö] were pronounced uniformly in Old Japanese as [ša ši šu še šo], and in accordance with these views he has evolved a theory of the changes necessary to relate this set of syllables to subsequent developments in the language. (Similar developments account for the parallel voiced set with *z*.) Mabuchi's opinions on this problem have yet to be widely accepted in Japanese scholarship, but they deserve more attention in the future.

The occurrence of phonemes in the Old Japanese syllable was further limited by syntactic considerations. Syllables consisting of vowel only (or of /ʼ/ plus vowel, as above) occurred only at the beginning of the utterance; in other positions such syllables gave rise to certain morphophonemic changes or substitutions. The result of this was to prevent the occurrence of vowel-initial syllables in any but utterance-initial position. One of the vowels which otherwise would have come together in a vowel-plus-vowel sequence was dropped, generally the final vowel of the preceding morpheme, thus *waga iFe* > *wagiFe* "my house," *ara iso* > *ariso* "rough surf," *misi okonaFasu* > *misokonaFasu* "see" (< "see" + "do"), *sö tu ömö* > *sötömö* "north" (< "back" + grammatical particle + "side"), *kötö itakuari* > *kötitakari* "rumors are cruel" (< "rumors" + "painful"). But loss of the initial vowel in the second morpheme is also irregularly noted, especially when it is a closer vowel than the final one in the preceding morpheme; thus, alongside the example above, *waga iFe* > *wagaFe* is also found, and *kata ömöFi* > *katamöFi* "one-sided love," *kaFa ötö* > *kaFatö* "sound of the river," *Fanare iso* > *Fanareso* "distant surf."

Another important set of these morphophonemic changes involved replacement of the potential vowel-plus-vowel sequence with a third and different single vowel, according to a regular set of assimilatory replacements: (1) *i* + *a* replaced by *e: sakiari* > *sakeri* "are blooming," *ukiaku* > *ukeku* "is being sad," *samuki aku* > *samukeku* "when cold," *ki aru* > *keru* "be come here"; (2) *a* + *i* replaced by *ë: takaiti* > *takëti* "high market-place (place name)," *nagaiki* > *nagëki* "long breath, sigh"; (3) *ö* + *i* replaced by *ï:* (**öFö-* >) *öFoisi* > *öFïsi* "large stone." These morphophonemic replacements are the chief basis for the assumptions concerning the vocalism of a Pre-Suiko stage for Old Japanese noted above, with vowels *i, u, ö, o,* and *a,* and later *e* < *ia*, *ë* < *ai*, and *ï* < *öï* and also < *ui*. These and a number of other parallel morphophonemic replacements also make it possible, through internal reconstruction, to trace the pre-history of the Japanese verb inflections in considerable detail, as we shall see below.

In another minor but allied pattern of morphophonemic change in Old Japanese, morphemes with initial vowels in isolation sometimes had an unpredictable allomorph with initial consonant in composition, thus *amë*, *-samë* "rain" in *Farusamë* "spring rain" (*Faru* "spring"); but if all vowel-initial morphemes are treated instead as beginning in /'/ this variety of morphologically-determined allomorph becomes somewhat less surprising, *'ame*, *-same*, and involves only an initial consonantal alternation. Still, phonemic /Farusamë/ was phonetically [Farut^{s}amë], if we follow Arisaka's original formulation, and it is easy to account for the resulting modern form with -*s*- if we reconstruct the oldest form as **Faru tu amë* with the allomorph *tu* of the referrent particle (the other main allomorph of this particle was Old Japanese *nö*); this shifted in pronunciation to [t^{s}u], and the resulting [*Farut^{s}uamë] was then analogically remodeled to [*Farut^{s}amë], /Farusamë/, according to the general patterns for the simplification of vowel sequences noted above, as, for example, in the case of *sötömo* "north."

In morphemes of Japanese origin, as distinct from Chinese loanwords, *r*, *b*, *d*, *g*, and *z* (i.e. the [z] allophone of /d^{z}/) did not occur in utterance-initial position, though the importation of Chinese vocabulary items soon led to the abandonment of this restriction within the Old Japanese phonological system. When *k*, *s*, *t*, and *F* were found initial in morphemes occurring in second position in composition they were often but not always regularly voiced to become *g*, *z*, *d*, and *b*; thus, in the first poem of the *Man'yōshū* the word *Fukusi* "bamboo spade" is found in the first line but immediately following in the same poem there occurs *mibukusi* "fine bamboo spade," where the voicing *F* > *b* is shown in the script by the *man'yōgana* writing *Fu* with Chinese *pu*, Middle Chinese *puo* in the first case against the *man'yōgana* writing *bu* with Chinese *fu*, Middle Chinese *b'i̯u* in the second. This voicing of the initial phoneme of morphemes in composition continues to be a significant feature of the language down into the modern Japanese period, where it remains an unpredictable feature. Probably there were Old Japanese dialects where such voicing was completely regular, or at least predictable in terms of pitch, juncture, or other features which the script does not record and which are therefore largely beyond our grasp. Later dialect borrowing between such Old Japanese dialects and others in which the phenomenon did not occur resulted in the irregular and unpredictable situation which is already present in the older texts and which remains a feature of the modern language.

The choice of characters used in the *man'yōgana* makes it clear that the Old Japanese on which the earliest written records were based had a significant distinction between voiced and voiceless consonant phonemes. This distinction has continued to be an important one throughout the history of the language. It would not be necessary to make a special point of this were it not for the fact that certain orthographic conventions in the early texts have caused some Japanese scholars to conclude that the earliest stages of the language did not contrast voiced and voiceless consonants, and that this distinction was somehow spontaneously generated later in the history of the language. But this view is clearly erroneous and was based on incomplete evidence. There are certain instances, to be sure, where the *man'yōgana* does not overtly indicate this phonological opposition, and the later phonetic syllabary scripts (*hiragana, katakana*) derived from the *man'yōgana* as they were generally employed for most of Japanese linguistic history did not mark it. According to some students of the problem, the present practice of indicating the distinction between voiced and voiceless sounds by means of diacritics added to the signs of the *kana* syllabaries did not become widespread until the days of the Jesuit mission press in the late sixteenth century. At any rate, the Jesuits certainly pioneered in the use of a small circle placed alongside the *kana* signs for Old Japanese *F*, modern *h*, as a diacritic indicating that the sign was a writing for *p*. The development of this /p/ phoneme itself is to some extent another of the blind spots in our knowledge of Japanese historical phonology. Some scholars insist that what we write as Old Japanese *F* was articulated as [p] in the earliest period, and the comparative evidence, such as it is, certainly does seem to indicate that Old Japanese *F* goes back to an earlier *p*. Perhaps the sound had once been part of the early Old Japanese phonemic inventory, and was re-introduced into the language sometime after it had shifted /p/ > /F/; or perhaps the /p/ was new and when it was later introduced into the system simply fell into place in the phonological "gaps" which the system provided for it. In either case, the introduction of *p* took place in three major ways —by the coining of expressive adverbs, often etymologically related to forms in *h-<F-* (*pikapika* "with a flash," alongside *hikar-u* "it shines, flashes"), "cute" words (*pochi* "a dot"), and borrowings (*poketto* "pocket"). It was quite natural in this last connection that the need for an unambiguous symbol with which to note [p], especially in initial position, came to the attention of the missionaries, in such loanwords as *pāteru nausuteru* "Pater noster" and *poroFeta* "Propheta." The now-common small raised circle as a diacritic for [p] is one of several orthographic innovations introduced in the *Racuyoxu* (i.e. *Rakuyōshū*), a lexical work which appeared from the mission presses in Nagasaki in 1598. In non-initial position it was by this time common chiefly as a development in composition of an earlier *F* from various Chinese labial initials in loanwords, thus *ippon* "one book," *ippitsu* "one writing brush," etc. Diacritics to indicate voicing and to distinguish *p* were still not regularly employed in certain varieties of official and military documents down to the end of World War II, even though by that time their use had become common in almost all other types of writing and printing. There is sufficient evidence now available in recent Japanese studies to show that these lapses in the orthographic tradition were nothing more than that, and that the voiced and voiceless distinction has been a significant feature of Japanese phonology from the earliest stages of the language.

Old Japanese also shows certain structural limitations in the distribution of its eight vowel phonemes. To some observers these restrictions on the occurrence of the Old Japanese vowels have appeared to be similar to the phenomenon which is generally called "vowel harmony" in the Altaic languages. What is actually seen in Old Japanese is significantly different from the systems of vowel concord ("harmony") which are recorded for many of the languages of the Asiatic mainland. Even if it did resemble them far more than it does, it would still not provide any evidence for a genetic relationship between Old Japanese and these languages. The phenomenon has, however, traditionally been of extraordinary interest to Japanese scholars because they have generally held that the absence or presence of a system of "vowel harmony" in Old Japanese would be of significance in determining the genetic relation of Japanese to other languages. In the absence of any real criteria for distinguishing here between the possible and the probable, it is best simply to note in outline how much of this variety of structural limitation can be discerned in the Old Japanese texts, and avoid undue emphasis on the role of this phenomenon in any attempt at a demonstration of the genetic relationship of Japanese.

The eight vowels of Old Japanese on the basis of their occurrence together with each other fall structurally into three groups: (1) *a, o, u,* (2) *ö*, and (3) *i;* the other three vowels form another group (4) *e, ë, ï,* the members of which occur freely in no significant patterns. The patterns of limitation which are observed in Old Japanese for groups (1), (2), and (3) are found only in root morphemes, and there is no "vowel harmony" between these root morphemes and affixed elements, including particles, though a few early examples seem to show that "vowel harmony" in affixed particles might have been common at a period somewhat predating the bulk of the Old Japanese texts; thus, in *Bussokuseki* 1, in two successive lines of the same poem the possessive particle is *ga* when following *titiFaFa* "father and mother," but immediately below it is *nö* when following *moröFitö* "everyone."

As examples of combinations involving vowel groups (1) and (2) the following are the most important patterns: *ö* and *o* do not occur together in the same root morpheme; *ö* does not occur in the same bisyllabic root morpheme with *u;* and *ö* "seldom" occurs in the same root morpheme with *a*. Thus, for examples of combinations of *o* and *o* in the same morpheme: *kogo* "briskly," *momo* "hundred; thigh," *sinono* "drenched," *itoko* "dear."

For combinations of *u* and *o* in the same morpheme: *uko* "foolish," *kuso* "ordure," *kumo* "cloud," *kuro* "black," *suso* "sleeve," *tuto* "straw wrapper," *tuno* "animal horn," *Futo* "fat," *mozu* "shrike." Combinations of *a* and *o* in the same morpheme: *sora* "sky," *toga* "hemlock-spruce," *asob-u* "play, amuse," *kayoF-u* "visit habitually," *sato* "village," *Fato* "pigeon," *Faro* "far distant," *tanosi* "pleasant," *tadayoF-u* "float."

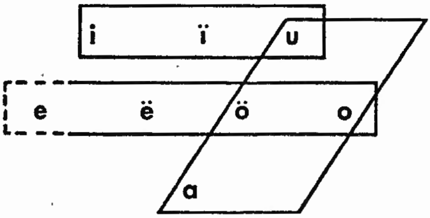
Vowel (2) *ö* is often found in combination with itself: *kötö* "thing; word; musical instrument," *götö* "like, every time," *tökö* "elevated platform," *tökörö* "place," *töyö* "flourishing, luxuriant," *yökö* "horizontal," *yörö* "10,000; many," *kökörö* "heart," *kökönö* "nine," *tötönöF-u* "arrange."

There are instances in the texts where *ö* does appear in the same morphemes with *a*, and in trisyllabic morphemes it also is sometimes found together with *u: töga* "offense," *töba* "eternal," *asö* "(term of affection)," *kasö* "father," *marö* "round," *usirö* "rear," *kusirö* "bracelet," *musirö* "straw-matting," *öyödure* "baseless unauspicious statement." However, combinations of *ö* and *o* are not found.

Vowel (3) *i* is found in free combination with vowels of group (1) and with vowel (2): *aki* "autumn," *kami* "top," *Fikari* "light," *aFabi* "abalone," *töki* "time," *Fitö* "person," *ömi* "retainer of a high-ranking person."

As noted above, the Old Japanese vowels *e*, *ë*, and *ï* do not participate in the above system of limited vowel distributions. This is usually attributed to the relatively late origin of these vowels in the history of Japanese phonology, of which further evidence is seen in their role as morphophonemic replacements for the combinations *i* + *a* > *e*, *a* + *i* > *ë*, and *ö* + *i* and *u* + *i* > *ï*, as already mentioned. A more precise chronology of these developments within the Old Japanese vowel system is needed, but in broad outline it is safe to assume that the above pattern of limited occurrence for certain of the Old Japanese vowels antedates the generalization of the assimilatory replacements resulting in *e*, *ë*, and *ï* as above. The general tendency of these three vowels to appear in morpheme-final position is also to some extent to be explained along these lines.

Any attempt at a description of Old Japanese would be incomplete without some account of the various systems of ablaut, both vocalic and consonantal, in which the language was rich. The vocalic ablaut system of the language has been described by Izui Hisanosuke. He has shown that the system of different vocalizations in related morphemes operating in the Old Japanese texts is a somewhat simplified and altered remnant of an earlier system that can now be recovered, and that in part, only through the technique of internal reconstruction. Much of our knowledge of this earlier, more elaborate system depends on a number of somewhat questionable etymologies, but as the system appears in the texts it is rather less controversial and chiefly involves the following sets of vowel alternations:



The solid lines enclose vowels functioning as sets in the ablaut system; the relationship of Old Japanese *e* to the rest of the system is somewhat less than clear in the texts. Examples of the relationships summarized in this diagram include *tukï* "moon," *töki* "time," *tökö* "everlasting," (non-standard) *tuku* "moon"; *yamï* "darkness," *yömi*, *yömö* "hell"; *tömö* "friend," *tuma* "wife"; *toFu* "ask," *töFu* "visit"; *kö-nö* "this," *kë-Fu* "today"; *Fï* "fire," *Fi* "day"; other important examples will be found below in the discussion of the Old Japanese numerals and their relationships with each other (*Fitö* "one," *Futa* "two," etc.)

The parallel consonantal variations have not yet been systematically treated; they have left their trace in, for example, the similarities to be seen in such forms as *yom-u* "read, read aloud" and *yob-u* "call aloud, name"; *oboshimeshi* "(elegant) thought" and *omoi*, deverbal from *omoF-u* "think, love," against *oboe-ru* "remember"; *saburaF-u* "wait in attendance upon a person of higher station" and *samurai* "warrior, feudal retainer"; and the old variants *emishi* and *ebisu* for the ethnic name of the non-Japanese "barbarians" to the north in the Old Japanese period.

It has already been noted that the distinction between Old Japanese *o* and *ö* following *m-* disappeared between the time of the *Kojiki* (712) and the *Man'yōshū* and *Nihon shoki* (720). In texts from the end of the Nara period this same distinction between *o* and *ö* following *n-*, *t-*, and *y-* began to be confused by the scribes, and the distinction between *e* and *ë* was similarly gradually leveled out following *k-*, *F-*, and, depending on the document, other phonemes. In the early Heian period the distinction between *i* and *ï* had been completely leveled into *i*, while *e* and *ë* had completely merged into *e*, and *o* and *ö* into *o*. The single exception was the distinction between *o* and *ö* following *k-* which was still being maintained, though already lost elsewhere in the system. By the beginning of the tenth century all traces of the eight-vowel system had disappeared from the written records, and the vowel system of Japanese from that point on remains essentially the modern five-vowel *a*, *i*, *u*, *e*, *o* pattern.

So many important changes appeared in the language just around the time when the capital of Japan was being moved from Nara to Kyoto that it is tempting to attempt to find in this geographical shift an easy explanation for why so much linguistic change suddenly took place. Unfortunately such an explanation does not fit the observed data and hence must be abandoned, for the changes, particularly those affecting the old eight-vowel system of the Nara period, appear to have taken place in Nara at about the same time as in Kyoto and at just about the same pace. A document which may be dated in the period 810–823, for example, and which comes from one of the important temples of Nara, already shows the Old Japanese *e* and *ë* distinction only after *F*- and the *o* and *ö* distinction only after *k*-, exactly as would be expected from a Kyoto document of comparable date.

Tracing and dating in detail all these shifts in vowel phonology of late Old Japanese would be a task far beyond our scope here, but some of the salient points may be mentioned together with some idea of how they have been arrived at. In this particular portion of its historical phonology, late Old Japanese reminds one very much of late Old and early Middle English, where each individual document shows a slightly different phonological structure and no completely uniform pattern of linear development can be traced which will embrace all known texts from first to last without discrepancies, exceptions and reservations. In Japan, for example, certain sound changes are noted at different times in different types of documents; thus, the distinction between Old Japanese *o* and *ö* is maintained longer in Buddhist texts than in historical documents. This variety of anomaly leads one to suspect that at a fairly early period certain orthographic traditions became set in different schools, and that these traditions persisted after the language had already shifted.

This was particularly true once the *hiragana* syllabary came into widespread use. The *hiragana* provided a highly decorative script, as much appreciated for its artistic and aesthetic values as for its practical applications, and words written in it easily fell into set orthographical patterns which tended to resist subsequent alteration to keep pace with later sound shifts. In the Heian period, even after the final trace of the old eight-vowel system, namely the distinction between *o* and *ö*, had disappeared from its last stronghold following *k*-, initial *e*- and *ye*- continued to be kept apart for almost another century. Minamoto Shitagō, writing about 934, confuses these two, which were then in the process of falling together as initial *ye*-; but other texts as late as 943 still keep them carefully distinct, perhaps again more out of faithfulness to an early orthographic tradition than because of the language itself. In the same way initial *o*- and *wo*- began to fall together as *wo*- around 1002, and from this time on they were generally not kept apart; but since a document from as early as about 950 uses only *wo*-, one again suspects that for some time the apparent preservation of the distinction was due only to the early establishment of an orthographic tradition.

Early Heian *F* was a voiceless bilabial fricative [ɸ] in all its occurrences, but around the middle of the Heian period it began to shift to [w] in intervocalic position. A few early cases of this shift can even be found in Nara texts, for example in the *Man'yōshū* 11, where the place-name *uruwagawa* is written once (2478) with a *man'yōgana* character for Old Japanese *wa* (Chinese *ho,* Middle Chinese *γuâ*), and somewhat later in the same book (2754) with a *man'yōgana* character for Old Japanese *Fa* (Chinese *pa,* Middle Chinese *pwăt*). Thus Old Japanese *kaFa* "river" shifted from [kaɸa] to [kawa], and Old Japanese *iFe* "house" shifted from [iɸe] to [iwe]. Compare with these the sequence of earlier forms for *ue* "topside" < **uwe* < **uFe* (this last actually **uFë*) which were postulated above on the basis of internal reconstruction, by which it is possible to trace exactly the same developments in their proper sequence. By the time of a document dated in correspondence with 1002, Old Japanese *wa* and *Fa* in medial position following vowels were completely confused, as also were *wi* and *Fi.* As early as a poem in the *Gosen wakashū* by a person who died in 957, a pun between Old Japanese *yama wi* "living in the mountains" and *yamaFi* "illness" is found, but the *Kokin wakashū* (905) does not yet give evidence of the change. Confusion of Old Japanese *u* and *Fu* is seen from documents dated 989 and 1007, where the final Middle Chinese *-p* of certain Chinese loanwords is found represented by Middle Japanese *-u* rather than the *-Fu* that would have been regular for Old Japanese. Old Japanese *F-* and *w-* began to be confused before *-e* and *-o* around 950, and the process is seen virtually completed in a document of 1002.

A tendency in certain early Heian dialects to lengthen final vowels in open syllables, curiously reminiscent of the modern dialects of Okinawa, is observed as early as a lexical text of 795; here *ka* "mosquito" is written phonetically in *man'yōgana* as *kaa,* and in the *Engishiki* (*Institutes of the Engi Period*) of 927 Old Japanese *wi,* modern *i* "the rush *Iuncus effusus* (used for making mats)" is written phonetically in *man'yōgana* characters as *wii.* It would seem that a direct link with the Okinawa dialects where this lengthening is common today is indicated in these early sources. A similar phenomenon is not unknown today in certain Eastern Japanese dialects.

Old Japanese had relatively few original forms with initial voiced stops. In the late Old and Middle Japanese period the loss of Old Japanese prefixed *i-* and *u-,* elements found in several words but of obscure origin and unclear semantic significance, soon upset this pattern and left voiced initials relatively common as a result. Thus, Old Japanese *idure* "which" > *dore; iduko* "where" > *doko* (both with irregular replacement of Old Japanese *u* by later *o*); *idak-u* "embrace" > *daku; iduru* "come out" > *deru; ubaF-u* "rob, snatch" > *baF-u; iFara, ubara* "thorn" > *bara.*

The early tenth-century phonemic inventory of Japanese was then, in broad outline, the following:

Vowels: *a i u e o.* Consonants: *k g s z t d b n F m y r w.* Syllabic occurrence: all possibilities realized in syllables of two types, vowel only (with the same possibilities of interpolating initial /'/, as above), and consonant plus vowel, except for the homorganic combinations **yi* and **wu* which did not occur. Notable allophones: /si/ was pronounced [ši] and /se/ was pronounced [še]; parallel to this, /zi/ was pronounced [ži] and /ze/ was pronounced [že].

In the consonant system the most important difference between the earlier system presented above and this one for the early tenth century is not a structural one, but simply a change in pronunciation; the [s] allophones of the earlier affricate phoneme /t^{s}/ had by now been extended to all occurrences of the phoneme, so that earlier

[t^{s}a] [si] [t^{s}u] [se] [t^{s}o]

became

[sa] [si] [su] [se] [so],

and eventually, with fronting before the two high vowels,

[sa] [ši] [su] [še] [so].

It is impossible to determine whether this second stage took place before, during, or after the falling together of /t^{s}o/ and /t^{s}ö/; it is also at present impossible to establish a more precise relative chronology for the extension of the [s] allophone and the development in turn of a [š] allophone before later *i* and *e;* at any rate, this is what happened, while parallel changes also resulted in a shift of pronunciation but not in a change of structure in similar combinations of earlier /d^{z}/ with the same vowels. (Of course, if the Mabuchi revisions of the accepted doctrine on the pronunciation of Old Japanese *s* are accepted, these developments as sketched here must also be revised.)

The late variety of Old Japanese described immediately above was most important in the history of the language for a great number of changes in pronunciation, most of which also eventually altered the structure of the language. Japanese scholars generally lump all these together under the general term *onbin*, "(lit.) euphony" (*on* "sound" + *bin* "facilitate") under which they treat almost any variety of sound or structural change which took place during the later Old Japanese period. The term is a Chinese loanword but one which seems to have been manufactured in Japan from Chinese elements, since it appears to be unknown either as a word or as a technical term in Chinese.

The chief changes which must be reckoned with here were the following: (1) Changes involving consonants before late Old Japanese *-i:* (i) *k-*, *g-*, and *s-* were often but apparently sporadically lost before *i*, both that deriving from earlier *i* and that deriving from earlier *ï:* *sukigaki* > *suigai* "fence of wood or bamboo set with slight intervals between each," *tugite* > *tuide* "next," *masite* > *maite* "generally"; (ii) *-F-*, *-t-*, and *-r-* were lost before *-i* of both origins in verbal gerunds (this can also often be described equally well as loss of the *-i* and subsequent consonant assimilation), resulting in geminate consonants, a new development in Japanese phonology: *katite* > *katte* "winning," *tatakaFite* > *tatakatte* "fighting," *arite* > *atte* "having, being."

The exact chronology and historical dialectology of sets (i) and (ii) above is at present only imperfectly understood. Here again, it is probable that regular and automatic patterns in one or more late Old Japanese dialects were disturbed by dialect borrowing, so that most of the Middle Japanese dialects and all the modern ones represent not a single direct inheritance from any single Old Japanese dialect but rather a mosaic of conflicting and contradictory evidence. Moreover, the argument often threatens to become circular, given the lack of sufficiently well organized data and careful study of the manuscript evidence. For example, the form *kai* "rudder" is often cited as an extremely early instance of the loss of *-k-* before *-i*, on the theory that this word originated in a deverbal **kaki* from *kak-u* "scratch." As we have seen above, fairly impressive comparative evidence now seems to indicate rather that the form *kai* goes back to early Old Japanese **kayi*, and that it never had any connection with *kak-u*, since it is almost surely an old loanword of Altaic origin cognate with Turkish *qayïq*.

If the changes had been regular in all the dialects, there would presumably have been no surviving cases of the phonemes in the contexts affected by these changes, or at the very least no surviving doublets in which both unshifted and shifted versions of the same deverbal element are found, such as for example *taimatsu* "torch" and *takibi* "an open fire, a bonfire," both involving *taki* from *tak-u* "light a fire," or *tsuitachi* "first day of the (lunar) month," from *tsuki* "month" and a deverbal from *tatsu* /tat-u/ "stand, be established."

(2) Changes involving certain consonants before late Old Japanese *-u:* (i) *k* and *g* before *-u* were lost in a pattern that was probably uniform in one or more late Old Japanese dialects but which in the written records and in the later forms of the language is rendered sporadic by dialect borrowings: *siroku* > *sirou* "white (adverbial)"; *sitagutu* > *sitaudu* "ceremonial footwear" (note the secondary voicing of original *-t-* in this position); **kokuFu* > *koufu* "provincial capital" (a Chinese loanword); (ii) *-F-* before *-i* assimilated to *wi* and then this combination in turn further assimilated and fell together with *u: osoFite* > *osowite* > *osoute* "striking, attacking" (we have already noted these stages in the general *aFi* > *ō* development sketched above, in the discussion of the relation of Old Japanese *-ö* to its transcription by means of Middle Chinese *-ậi*); (iii) the combinations *bi* and *mi* underwent special changes, notably again in the verbal gerunds, where their vowel was first assimilated to a homorganic nasalized *-ũ-* which then in some cases fell together with an independent nasalized [ũ] inherited from a slightly earlier stage of the language; and in certain dialects this vowel was then established as a separate phonemic unit, nasalized /ũ/ distinct from and contrasting with non-nasalized/u/. In the verbal gerunds this nasalized *ũ* before dentals later shifted to the syllabic nasal *-n: tobite* > *toũde* > *tonde* "flying," *momite* > *moũde* > *monde* "kneading."

It is extremely difficult to distinguish these changes from parallel ones involving the dropping out by contraction of an *-i-* before the *-te* of verbal gerunds, and the assimilation of the *-b-* or *-m-* preceding this *-i-* to the position of articulation of the *-t-*; this together with other changes eventually produced a syllabic nasal in such positions and subsequently the voicing of the *-t-*: *tobite* > *tonde* "flying," *yomite* > *yonde* "reading." When the consonant preceding this contracted *-i-* was already *-n-* it now simply became syllabic but the voicing of the following *-t-* also took place: *sinite* > *sinde* "dying." These changes upset the regular pattern of gerund formation which characterized Old and Middle Japanese and eventually produced the far more complex morphology for this part of the verb in Modern Japanese. Some texts show such forms as *toude* which indicate an intermediate stage with a nasalized *ũ;* others indicate a change directly from *tobite* to *tonde* without this intermediate stage. No doubt both developments were common, and since both resulted in the same end-product their course is now virtually impossible to unravel. The late Old Japanese period also saw the development of a nasalized *ĩ*, established in certain late Old Japanese dialects as a separate phoneme contrasting with non-nasalized *i*, and perhaps this development should be completed with an intermediate stage *toĩte*.

In an important study which does a great deal to introduce a semblance of order into the study of these changes, Vos has recently shown that by restricting the materials to one text at a time and by comparing the findings from one text with similarly restricted data from other sources it is possible to demonstrate certain fairly distinct patterns of change. In particular his attention was directed toward the loss of intervocalic *-k-* in certain adjective forms, thus *utsukushiku* > *utsukushū* "beautifully," and *itaku* "painfully" > *itau* > *itō̆* "very." Vos has shown that between the years 905 and 1011 prose works show a steady increase in the loss of this *-k-*, and most significantly, that the loss appears first of all in a certain number of "set" or stereotyped words and expressions (*karaku shite* "doing with difficulty" > *karōjite* "barely") from which it appears to have been extended somewhat later to others (*hisashiku* > *hisashū* "for a long time"). During the process of this extension, both forms with *-k-* and forms without *-k-* appear side by side in the texts. Vos has also shown that, for example, in the introductory and narrative prose portions of one of the early poetic anthologies, *hisashū* is used 36 times against *hisashiku* which appears 13 times, and also that these same prose portions of this text more frequently show the loss of this *-k-* than do similar portions of another poetic anthology predating it in time of compilation. Future studies along the lines which Vos has shown to be productive will no doubt further clarify the exact progress of these changes, which traditional scholarship has far too often jumbled together into an undifferentiated mass.

The two nasalized vowels, *ũ* and *ĩ*, are of particular significance in considering the ways in which Old and especially late Old Japanese phonology managed the accommodation of the sound system of Middle Chinese, which became necessary about this time as the number of direct lexical loans from Chinese into Japanese began to increase. Already in the *Man'yōshū* there are several occurrences of Chinese loanwords, and from the tenth century on they steadily grew in number. The Chinese and Old-Japanese sound systems were, as is only to be expected, considerably different from each other, but a fairly regular pattern of equivalences for loanwords was soon in operation. Of particular interest here is the equivalence of Japanese nasalized final *-ũ* and *-ĩ* with Middle Chinese final *-ng*. The *Man'yōshū* already has *kuũ* for Chinese *kung*, Middle Chinese *kung*, "achievement, merit" and the general pattern became the use of late Old Japanese nasalized *-ũ* for Chinese final *-ng* following low and back vowels, and late Old Japanese nasalized *-ĩ* for Chinese final *-ng* following high and front vowels; thus, late Old Japanese *myaũ* > modern *myō* for Middle Chinese *mi̯wɒng*, Pekingese *ming* "bright," but late Old Japanese *yeĩ* > modern *ei* for Middle Chinese *·i̯ɒng*, Pekingese *ying* "flourishing." Subsequent changes in Japanese further obscured this original pattern; first the nasalized vowels *ũ* and *ĩ* were denasalized and fell together with ordinary *u* and *i*. Then, as we shall see below, the various new combinations of vowels which came into being in late Old Japanese underwent assimilatory and other changes eventually resulting in the long vowels of modern Japanese.

Like the syllabic nasal, these nasalized vowels of late Old Japanese are sometimes treated as if they were mere noises somehow invented by speakers of the period to deal with the necessity of accommodating Chinese loanwords; but the evidence in both cases is that they were phonemes of purely Japanese origin developed in various ways within Japanese, quite apart from any phonological "stimulus" which the growing numbers of continental loanwords may have presented. Certainly the nasalized vowel phonemes were by no means limited to Chinese loanwords; *kamibe* "god clan" has given both the modern place name Kōbe and the modern surname Kanbe, both from *kaũbë*; cf. also modern *kōbe* < *koube* < *kaũbë* "head," the history of which has been confused by and perhaps also influenced by Chinese *kuan*, Middle Chinese *kuan*, Sino-Japanese *kan* "official cap," and the verbs *kanmur-u*, var. *kabur-u* "wear on the head," (deverbal) *kanmuri* "crown." In some varieties of Old and late Old Japanese nasalized *ũ* also appeared in syllable-initial position. Particularly well attested as examples of this happen to be two very old Chinese loanwords, modern *uma* "horse" < *ũma*, from Middle Chinese *ma*, and *ume* "flowering plum" < *ũme*, from Middle Chinese *muậi*, Pekingese *mei*. In the texts each of these has the early doublets *uma* and *muma*, and *ume* and *mume*, and in modern Tokyo speech their pronunciation today still shows free variation between [uma] and [mma] and [ume] and [mme], with a geminate initial consonant in the second variety.

Even further complications are introduced here by the fact that in certain northern Chinese dialects of the eighth and ninth centuries final Chinese *-ng* itself appears to have been pronounced as a nasalization of the vowel or vowels preceding it, and this variety of speech may also have affected the phonetic shape of some of the Chinese loanwords in Japanese.

Quite apart from these problems involving nasalized *ũ* and *ĩ*, there is other evidence for changes within the phonological structure of late Old Japanese in order to accommodate the growing numbers of Chinese loanwords. Syllable- and utterance-initial *r-* became common, to accommodate words with initial *l-* in Chinese. Syllables with voiced initials began to be more and more common, which had not been true of Old Japanese; partly, as seen above, this was aided by the frequent loss of prefixed Old Japanese *i-* and *u-*. The phoneme *F* began to be limited to utterance-initial position; internally in an utterance *F-* began to fall together with *w-* before *-a*, *-i*, *-e*, and *-o*, and to shift to zero before homorganic *-u;* in some late Old Japanese dialects *-F-* before any of the five vowels within an utterance shifted instead to *-b-*.

The syllabic nasal which resulted from or played a part in many of these changes was just what its name implies—a continuant voiced nasal phoneme which took as long to articulate as any other syllable in the language, whether a syllable of the zero initial plus vowel (or /'/ plus vowel) or consonant plus vowel variety. It has sometimes been suggested that this syllabic nasal was developed in the language in order to make it possible to reproduce Chinese loanwords in Chinese final *-n*. But it is clear rather that it originated in purely Japanese forms, and that once it had developed in such contexts it was then available for accommodating the new Chinese loanword vocabulary.

Middle Chinese presented many phonological difficulties to the Japanese once they came to grips with the problem of adapting its forms as loanwords in Japanese. These problems were not primarily due to any numerical lack of distinctive units in Old Japanese with which to imitate the sounds of Middle Chinese. Rather they arose chiefly because of the markedly different phonological structure of the typical morpheme in the two languages.

Middle Chinese had a wide variety of syllable- and morpheme-final consonants, *-p*, *-t*, *-k*, *-m*, *-n*, and *-ng* (phonologically this last was always the unit phoneme /ŋ/, but it is written *-ng* here throughout for orthographic simplicity, since this writing causes no confusion). But Old Japanese originally had no syllable-final consonants at all.

As a result, as Chinese loanwords entered Old Japanese, something in the system had to give; and the necessary adjustments were made along the following lines.

Middle Chinese final *-p, -t, -k, -m, -n,* and *-ng* were regularly rendered in the earliest Chinese loanwords into Japanese with (in the same order) Japanese *-F-, -t-, -k-, -m-, -n-,* and *-g-,* the consonant listed being followed in each case by an added vowel, generally either Old Japanese *-i* or *-u,* and less commonly *-a, -e,* and *-o.* These were added to make the over-all result conform to the normal Japanese syllable pattern of consonant plus vowel. In the earliest loans these added vowels follow no particular scheme. Later on as the loan process became more common and increasingly sophisticated their choice was virtually limited to *-i* and *-u,* which were added according to a simple pattern of what might actually be termed "vowel harmony" (one of the rare instances where this term may accurately be applied to Japanese). Thus, *-i* was added following the Japanese *-F-, -t-, -k-, -m-, -n-,* and *-g-* when the vowel preceding these consonants in the loan form was Old Japanese *-i-, -ï-,* or *-e-,* while *-u* was added when the vowel preceding the consonant in Japanese was Old Japanese *-a-, -u-, -o-,* or *-ö-.* But until this regular pattern was established there is considerable evidence for virtually free variation in this added vowel.

It is particularly important to note that in the earliest Chinese loanwords in Japanese, original Chinese final *-n* is regularly represented by Old Japanese *-ni,* original Chinese final *-m* by Old Japanese *-mi* or *-mu,* and original Chinese final *-ng* by Old Japanese *-gi* or *-gu.* Again, it took some time for a regular pattern to appear here, but the evidence makes it clear that the Japanese syllabic nasal *-n* was not "manufactured" to cope with the problems of phonology in Chinese loanwords. When the syllabic nasal did become available in the Japanese phonological repertory it was naturally then used for Chinese *-n,* and also for Chinese *-m* which itself had helped to complicate the situation by shifting around this time to Chinese *-n.* In the meantime Old Japanese nasalized *-ũ* and *-ĩ,* already discussed, had become available for Chinese *-ng,* avoiding from that point on any further necessity for rendering them with Japanese *-gi* and *-gu.*

Evidence which may be cited here from the early texts is of two varieties; one consists of actual lexical loans from Chinese into Japanese, the other of examples of early *Man'yōgana*-style transcriptions of Japanese personal and place names into Chinese characters. In fact, it was in a study dealing with this second type of evidence that the Japanese priest Gimon (1786–1843) was first able to demonstrate that Middle Chinese originally had morphemes ending in *-m* as well as morphemes ending in *-n*. This study of the problem was probably the first attempt anywhere in the world, including China, to reconstruct precise phonetic values for the phonological categories of Old Chinese. At any rate, data of both varieties may be cited here to demonstrate the wide variation which was possible, in the earliest period, both in the Japanese consonant and in the Japanese added vowel following this consonant in Old Japanese representations of original Chinese final *-n:*

Chinese	Old Japanese Loan or Transcription Value
hsin "believe"	*sina*
yin "depend on"	*ina*
nan "difficult"	*nani*
min "diligent"	*minu*
yün "cloud"	*une, uru*
tsan "praise"	*sara*
chün "commandery"	*guri*
chün "rapid"	*suru*
tan "cinnabar"	*tadi*

The sporadic appearance of Japanese *-r-* among these items is of great interest, partly in view of some of the other phonetic developments discussed below, partly because it is probably to this phenomenon that *kara*, the Old Japanese word for "China," is to be traced, from one or the other of two homophonous words, both *han* < *γân*, for *han* name of a Chinese river, later of a dynasty, or *han* an old name for a part of Korea.

With original Chinese *-m* equally scattered representations can be cited:

hsin "heart" (<original *-m*)	*simi*
nan "man" (<original *-m*)	*nama*
san "three" (<original *-m*)	*sabu* (as in the given name *saburō*).

In certain other cases which appear to involve sporadic or irregular representation of Chinese final consonants in Old Japanese it is clear that semantic contamination between the Chinese form and a Japanese form which happened to resemble it in sound and meaning has been partly responsible for the form of the loanword in Japanese; thus *li* "stand, erect," < original *-p*, by contamination with Old

Japanese *tat-u* "stand," gave *ritu* > *ritsu;* the later "regular" *kan'on* and *go'on* as registered in the lexical sources are both *riFu* > *ryū*. So also *shen* "body," < original *-n,* which gave Old Japanese *zimi* by contamination with *mi* "body," the Japanese morpheme which was semantically equated with the same Chinese character. The use of Chinese *tan* "cinnabar" in the traditional orthography for the Japanese place name Itami indicates that Japanese *tami* could also at times be associated with it. Here we are tempted to invoke the medieval Chinese association of cinnabar with pharmacology and suspect again a contamination with Japanese *itam-u* "be in pain," a form which is itself in some relation to *yam-u* "be ill" (compare *tak-u* "burn a fire" and *yak-u* "bake," and the correspondences of Altaic initial *d-* with Japanese initial *y-* cited above).

Comparable data involving early Japanese representations of Chinese *-ng* include the following:

Chinese	Old Japanese
hsiung "bell"	*sigu*
tang "relate to"	*tagi*
hsiang "perfume"	*kagu, kaga*
miang "behold"	*magu*
liang "good"	*ragi*
nang "bag"	*nagi*
yung "valiant"	*igu*
hsiang "visage, aspect"	*saga*
hsiang "omen"	*saga*
sung "pair"	*sugu*

In the present state of the materials available to us, it is unfortunately all but impossible to describe the development of the Japanese syllabic nasal phoneme in any precise historical detail. The Japanese handbooks, often prolix in their treatment of problems far less important for the history of the language, are extremely disappointing in their accounts of this feature. One wonders why the problem has not attracted more attention.

There is general agreement that the syllabic nasal was not a part of the phonology of Old Japanese. Had it been, there should have been a symbol for it in the *man'yōgana* repertories, and there is not. At the very least, the *man'yōgana* might have been expected to represent it by means of some of the many characters for Chinese morphemes ending in final *-n, -m,* or *-ng,* but when it does use these characters the Chinese final nasal phonemes appear to be consistently ignored. For these reasons the general agreement on the absence of the syllabic nasal from Old Japanese phonology seems completely justified. By the end of the Heian period, however, the syllabic nasal phoneme is an important part of the Japanese phonological system, and some explanation must be attempted for the appearance at this time of something which was not present at all at an earlier period. Unfortunately, the question of precisely when and how this phoneme arose is almost impossible to answer. The earliest date for which there is an unambiguous citation available for it is sometime in the three decades between 1011 and 1041. We are faced with a virtual blank in our knowledge of the development of this feature stretching over two full centuries.

To give a concrete example of the problem there are two words in the modern language which are used as suffixes for respectful address—*sama* and *san*, the second form ending in the syllabic nasal. The general assumption is that *sama*, the more formal of the pair, is a more or less unchanged descendant of an older form and that *san*, the less formal one, is a later considerably altered version of this older form, and one in which the final *-n* has somehow "developed" from the earlier *-ma* sequence. There seems no valid reason to question this assumption. But if we consult the lexical sources available to us today we find that it is impossible from the materials they supply even to attempt to sketch the history of these two forms. Precise documentation of the appearance of one or the other of these is simply not one of the features of linguistic history which has interested Japanese scholarship to date; and until it does, or until someone else is prepared to take on the enormous task of a careful reading of all the relevant texts in order to get the materials necessary for the history of such forms, little can be done. And not even reading the texts in printed editions without constant reference to the manuscript evidence, which is not physically possible in the majority of instances, would be sufficient, since editors often have normalized the orthography in this connection and thereby obscured precisely those points of interest here.

Some scholars have attempted to date the development of the syllabic nasal at least as far back as the time of certain of the *Man'yōshū* poems, on the grounds that such *Man'yōshū* forms as *kamukaze* "divine wind" (*kami* "god," *kaze* "wind") are meant to be writings for **kankaze*, but this seems an unlikely argument. Had a syllabic nasal existed in the language at the time of the *Man'yōshū* it would surely have been most logical for the scribes to render it with the Chinese final *-n* or *-ng* or even *-m* easily available to them; and Old Japanese forms of the *kamukaze* variety are better described not only on orthographic but also on morphological grounds as examples of special allomorphs in composition of the type already cited above in the consideration of Old Japanese vocalism. On the other hand, there is also evidence, some of which we shall see below in the discussion of pre-nasalization in Old Japanese, for the existence of at least some contracted "nonce" forms with what were presumably syllabic *m* and *n* in the developments of certain forms in the *Man'yōshū* language.

The oldest examples of forms with the syllabic nasal which appear to be citable from the literature date from the later part of the Heian period. However, so long as the text is in *man'yōgana* or even in *hiragana* or *katakana* the evidence is often ambiguous, since for a long time after the phoneme *-n* had already become established in the language the tradition remained to write it with the *kana* signs for *-mu* or *-nu*, of which sequences it was often a development. Even today this same orthographic tradition is often followed in the formal written style. The result is that in early texts one is often tempted to interpret a *-nu* or *-mu* writing as a traditional orthographic equivalent for the syllabic nasal *-n*, but at the same time one is unable to do so in the absence of other unambiguous evidence. Much could be determined about the history of this phoneme if the editors of texts were more careful always to inform their readers precisely what *kana* symbols were used in the various manuscripts which form the basis of their editions. Instead they almost always normalize their texts on the basis of their own views as to what should have stood in the manuscript. Since in general the manuscript tradition for most Heian texts is extremely late and complicated, the user of printed editions is virtually helpless on this score.

The oldest citation which seems to be possible for an unambiguous indication of the syllabic nasal *-n* occurs in the account of courtly customs and ceremonials known as the *Hokuzanshō*, written sometime after 1011 by the celebrated Heian poet Fujiwara Kintō (966–1041). The citation is unambiguous because it is transcribed into a late variety of *man'yōgana*, which breaks the *man'yōgana* rules by using a character in Chinese final *-n* for the Japanese syllabic nasal; it consists of the late Old Japanese verb form *sikiin*, "will be present," rendered with the Chinese characters *chih-chi-yin*, and is a polite imperative from the verb *sik-u* "attend upon," in which the ending *-n* is a development from an earlier *-mu* for future or tentative verb forms. The same form is independently attested, in another version of the same passage in a later but somewhat similar work, the *Gōke shidai* of Ōe Masafusa (1041–1111), where the *siki-* morpheme is written with the Chinese character *fu* "spread forth" as a *kun* and the final *-n* morpheme is written with the same unambiguous Chinese character *yin*, Middle Chinese *i̯uĕn*.

Apparently the earliest citable document in which the new unique *kana* sign for the syllabic nasal phoneme appears is a gloss to a Buddhist text in the collection of the Chiō-in in Kyoto, dated in correspondence with 1061. Here it is used in the verb form *iFinan* "is to be called, will be called" from *iF-u*, glossing Chinese *wei-ming* "is called, is named." These citations, few as they are, at least make it possible to fix the phenomenon somewhere before the middle of the eleventh century. Incidentally, it must be noted that the given name of the celebrated Heian poet Fujiwara Kintō himself, in whose writing the oldest of these citations is found, contains a valuable example of the use of the Japanese syllabic nasal *-n* to render a Chinese final *-ng*, since the first half of his name is written with Chinese *kung*. One is tempted to assign the generalization of the entire Japanese syllabic nasal phenomenon to the period spanned by his lifetime, a dating which would not contradict the other evidence in any way.

The next unambiguous evidence for the syllabic nasal comes from a source just a little over 100 years later, the Chinese literary miscellany *Hou-lin yü-lu* written by a literatus of the Southern Sung period named Lo Ta-ching. His dates are obscure but the text itself was completed between 1179 and 1185. This text, containing *inter alia* a few Japanese words in Chinese transcription, clearly uses Chinese final *-ng* and *-n* to transcribe the Japanese syllabic nasal. Several of these are in positions and forms where the appearance of the syllabic nasal raises more problems than it solves, but at any rate the transcriptions in this Sung text are phonetically unambiguous. They include *suzuri* "ink-stone" (the smooth stone slab on which India ink is ground and mixed with water), transcribed *sung-su-li*, for **sunzuri; fude* "writing brush" transcribed *fen-chih*, for **funde;* and *kaze* "wind" transcribed *k'e-an-chih*, for **kanze*. The first of these forms may well be a case of a syllabic nasal development from an original *-mi-* sequence, if the etymology of *suzuri* as coming from *sumi* "dry India ink" plus *suri*, deverbal from *sur-u* "scrape, grind" is to be allowed. The second is somewhat more controversial; *fude* is often thought to be a very old loanword from Chinese *pi*, Middle Chinese *pi̯ĕt*, "id.," but the late Old Japanese form *fumude* is also attested in an early lexical source. Some have attempted to derive *fude* from *fumi-* or *fumu-* plus *te* "hand," with various explanations for the prior element, including one which holds that it too is an old loanword from Chinese *wen* "written character, decoration," Middle Chinese *mi̯uən*. As can be seen even from this brief account the etymology of *fude* is one of the most disputed issues in Japanese linguistics, with a large literature, and while the *Hou-lin yü-lu* transcription throws no new light on its origins it does provide unique documentation for the form **funde*.

Subsequent transcriptions of Japanese words to be found scattered in several Chinese and Korean texts give many other examples of the syllabic nasal, especially in medial position before voiced consonants. Most of these date from the Ming dynasty or later, however, and hence they throw no further light on the earliest developments of this phoneme. One such account of Japan dating from 1471, for example, transcribes the personal and place name Yamaguchi as *yeh-mang-chiu-chi*, i.e., **yamanguchi*, exactly the form recorded somewhat later in the transcriptions of the Portuguese missionaries. Another Ming-period text has *higashi* "east" transcribed as *hsün-chieh-shih*, i.e., **hingashi*, another form well attested elsewhere. Such correspondences between materials of totally different nature and origins help to assure us that we are dealing here not with casual slips or graphic aberrations but with a real linguistic phenomenon.

Unfortunately, the comparative evidence, if any, which could perhaps shed some light on this general phenomenon has not yet been studied. In Manchu, for example, *-n-*, *-r-*, and *-s-* are apparently "inserted" in certain words in a way very reminiscent of the Japanese materials; proto-Altaic **g-*, which generally appears as *g*, has instead [ŋ] in Tungusic when *n*, *l*, or *r* follows in the second syllable; proto-Altaic **ž* normally corresponds to Tungusic *ž*, but it appears as Manchu *n-* when *-r-* follows in the second syllable; and *n*, *r*, and *l* go together to form a morphophonemic set in Chuvash. These and other apparently allied phonological processes should be explored at greater length and related if possible to the Japanese evidence.

Nevertheless, it is possible, even in this general linguistic wilderness, to identify five main ways in which the syllabic nasal developed in late Old Japanese, even though it is impossible at present to rank them in chronological sequence:

1. The syllabic nasal phoneme appears most often to have developed through syncope or apocope of syllables involving *n* or *m* followed by *-i* or *-u* or sometimes by *-a*. These changes were probably the result of factors of juncture, stress, rhythm, pitch, or the like, and as such they are all but impossible to reconstruct; certainly they have left no trace in the written records. Whatever the factors causing these changes, syllables involving *n* or *m* plus any of the vowels often tended, at some point in their history, and probably always through the intermediate stage of the nasalized vowels *ũ* and *ĩ*, to shift to the syllabic nasal. Thus we have Old Japanese *asaomi* "court official" which in late Old Japanese is regularly *ason*, where the final *-mi* has become the syllabic nasal, no doubt through an intermediate **asomi* > **asoĩ* > *ason*. The comparative chronology of these shifts involving the nasals and the vocalic replacement *ao* > *o* is obscure. Much the same development must have been the case for *sama* > *san*, already mentioned.

Developments of this sort have historically been the main source for what has today on the descriptive level become an intensive syllabic nasal infix. This occurs only before syllables beginning with voiced consonants, and has as a parallel a similar infix which occurs only before syllables beginning with voiceless consonants, and which results in the gemination of the voiceless consonant which it precedes. Historically many of the cases of this syllabic nasal infix may well have been developments from the grammatical particle *ni* "to, in, at," thus *sakin zuru* "advance" < *saki ni suru; karon zuru* "treat lightly," < **karo ni suru; omon zuru* "take seriously" < **omo ni suru*, etc. The process is often difficult to distinguish from assimilation of the variety noted below, thus *onna* "woman" < *wonna* < **woũna* < **womna* < *womina* < *wo* "small" + *ömina* "(elder) lady"; *kannazuki* "the godless month, i.e., the 10th lunar month" < **kaĩnaduki* < **kaminaduki* < **kamïnatukï* < *kamï naki tukï*. Many of the developments of *-n-* in verbal gerunds are to be assigned to this class, thus *tutusim-u* "treat reverently," gerund *tutusimite* > *tutusinde; kam-u* "bite" *kamite* > *kande*. Parallel developments of *-n-* in gerunds from verbs without a nasal in their stem raise other partly unsolved problems.

2. For reasons that remain almost totally obscure, the sequence *-ri-* in late Old Japanese appears to have had what can only be described as a "peculiar affinity" for assimilating with a following *n* + vowel sequence. A syllabic nasal was subsequently generated from

this assimilatory sequence (which was then in turn often simplified so that *nn* > *n*); thus *kari*+*na* > *kanna* > *kana* "the phonetic syllabary." Both *kanna* and *kana* appear to be in free distribution in the *Genji monogatari*, for example, with equal numbers of each, but perhaps such anomalies are the result of the vicissitudes of the manuscript tradition. Other common examples include *sakari ni* "in the highest" > *sakan ni; karinarazu* "necessarily" > *kannarazu* > *kanarazu; arinari* "be" > *annari;* and *arimeri* "may well be, probably is" > *anmeri*. The exact role of late Old Japanese *-r-* in this is still to be investigated, and it should probably be treated in connection with the old transcriptions of such Chinese sequences as *nan* by Japanese *nari*, already noted.

3. In some cases the syllabic nasal seems to have been generated as a part of a phenomenon of consonantal gemination for emphasis, a development to be dealt with sporadically throughout the history of the Japanese language; thus *minna* emphatic for *mina* "all," *manmaru*, emphatic for *mamaru* "perfectly round" (*ma-* "intensive suffix" plus *maru-i* "round"), *mannaka* "exact center" (*naka* "middle") or, in a form which surprisingly enough combines this emphatic gemination with a striking contraction, *ironna* "various," emphatic for *iroirona*. Since the syllabic nasal here is only a special variety of a much larger phenomenon of consonantal gemination, as for example in *yahari* alongside emphatic *yappari* "after all," or *happa* "leaf," (*ha* "id." reduplicated), any comprehensive account of its development will eventually also have to take into consideration the development of such sequences as *-pp-*, *-kk-*, *-tt-*, *-ss-*, and the like. Thus the same prefix *ma-* cited immediately above gives, with initial stops, *makkuro* "jet black," from *kuro-i* "black," or, somewhat more surprisingly, with initial zero it yields *-ss-* in *massao* "deathly pale" from *ao-i* "blue, green" (cf. the combining form *-same* for *ame* "rain").

4. Somewhat parallel to these cases, but still to be separated from them on semantic grounds because there appears to be no resulting value of intensification or emphasis in the secondary form, are a small number of doublets in more or less free variation, such as *sude* and *sunde* "already," *mada* and *manda* "yet, (not) yet," *yūbe* and *yumbe* "evening" (from earlier *yobe* and *yonbe*), and *tabi* and *tanbi* "time, occasion." In each instance the doublet form with *-n-* is, at least in the modern standard language of Tokyo, strongly stigmatized as "low class" and "vulgar"; with *tanbi* there is some evidence that at times

it also serves as an intensive form for *tabi*. Phonologically too these forms are to be treated separately from the above set, since in the above set it was a nasal *-na* or *-ma* which was geminated into a preceding *-n-*, while here the same phenomenon is observed with *-d-* and *-b-*.

5. In still another important but virtually unexplained variety of development, the *-n*(-) appears as the result of what is often a fairly sweeping assimilatory process, but one to be distinguished by the fact that to all appearances at least it does not seem to involve nasals at all (prior, that is to say, to the generation of the *-n!*). Thus, *kaditori* > *kajitori* > *kandori* "steersman, helmsman," *kahobase* > *kaobase* > *kanbase* "face, countenance," *warahabe* > *waranbe* "children, servants," and *akihito* > *akibito* > *akindo* "tradesman." One of the most remarkable of all these cases is that of the term *mandokoro* "administrative or executive office of a high-ranking official," < *matsuri*, deverbal from *matsur-u* "conduct religious ceremonies, worship, carry out government functions" + *tokoro* "place"; here the *-ri* sequence also involves the development in category 2 above. The frequency of such developments in compounds containing a preceding *-h-* < *-F-* leads one to suspect a partial explanation for the nasal here in an automatic Old Japanese nasalization of syllables following *F-*.

This, together with the other types of developments sketched above, left the way open for the creation of morphologically determined allomorphs ending in *-n*, such as the allomorph *on-* for *o-*, the general honorific or respectful prefix, and *men-* for *me-* "female," once these were isolated from such combinations as *onmae* "you" (*o-* plus *mae* "front") and *mendori* "hen" (*me-* plus *tori* "bird, chicken").

Once generated and regardless of the way in which it appeared, the syllabic nasal was often subject to complicated and sometimes inconsistent simplification or assimilation. In many cases these sporadic changes have no doubt been connected with the general tendency, already noted, to consider the member of a doublet containing *-n-* as being of lower social prestige than the other member of the doublet without it. This has led to linguistic change as well as to a good deal of anomalous development through hypercorrection. It is relatively easy to trace such processes as *ika ni ka* "how?" (*ika* "how," *ni*, grammatical particle, *ka*, interrogative particle) > **ikanga* > *ikaga*, but in other instances the course of change is less clearly understood. The process of hypercorrection may most strikingly be observed in the conflict between the members of the doublet *kobu* and *konbu* in the modern standard language; both forms refer to a variety of edible kelp much favored in the Japanese cuisine. The form *konbu* is the historically valid one for this Chinese loanword, but in current Tokyo usage it is stigmatized as a rather "low-class" pronunciation and by hypercorrection is generally replaced with *kobu* in the speech of educated persons, as if *konbu* were not the original historical form but a secondary pre-nasalization of an original *kobu*.

Another example of the role which such hypercorrection has played in vocabulary development involves two words for various types of hairpins. Both involve *kami* "hair of the head," plus *sashi* < *sasi*, deverbal from *sas-u* "insert, pierce." The commonest form today is *kanzashi*, with *-n-* from the original *-mi-* sequence, but from an early period a rival form *kazashi* was also developed through a hypercorrect treatment of the syllabic nasal of *kanzashi* as if it had been a "vulgar" pre-nasalization of the vowel preceding the *-z-* < *-s-*. This secondary (and hypercorrect) form *kazashi* was specialized, particularly from the Heian period on, first of all in the sense of a hairpin used to attach blossoms, foliage, and the like to the head for formal decorative purposes, and then, from somewhat later on, in the further specialized sense of an arrangement of artificial flowers used to decorate an official cap or other headdress. And it was the hypercorrect *kazashi* which, as we shall see below, the pioneer Japanese linguist Fujitani Nariakira (1738–1779) employed as an early grammatical term.

To be cited also in this connection is modern Tokyo (and presumably also historical Edo) *ton'ya* "wholesale dealer" from *toi-* < *toFi-*, associated at least in the traditional orthography with the verb *toF-u* "ask, enquire," plus *-ya* "shop." Here the pre-nasalized form *ton'ya* is the only one to be heard today, though the lexical sources refuse to list it except as a "vulgar" variant of **toiya*, but this last form does not actually occur in the language. Here the hesitancy of the sources to list *ton'ya* is to be explained by the low social prestige that other such pre-nasalized forms enjoy in the modern standard language, even though **toiya* is never heard in Tokyo.

Since the syllabic nasal phoneme is always voiced throughout its duration everywhere it appears, it is hardly surprising that in most of the above instances of what we have called its "generation" it appears immediately before a voiced stop; or, where the stop which it precedes was not voiced before its appearance (*kaji* + *tori*, *me* + *tori*), it surely is after the coming into being of the syllabic nasal (*kandori*, *mendori*). This phenomenon can hardly be isolated from the early rule that Chinese loanwords ending in *-n*, from original Chinese *-n* or *-m*, were to be followed in Japanese by voiced sounds, particularly by the voiced forms *zu* and *zuru* of the verb *su* "do" which so commonly follows Chinese loanwords, thus *kanzu*, *kanzuru* "think, feel," with the Chinese loanword *kan* (< *-m*); *shinzu*, *shinzuru* "trust" with the Chinese loanword *shin* (< *-n*), etc. Down to about 1380 a further refinement of this rule was rigorously observed in the language. Not only loans from original Chinese *-n* and *-m* but also loans from original Chinese *-ng*, which gave as we have seen open vocalic-ending syllables in Japanese, were also followed by *zu*, *zuru* rather than by *su*, *suru* as in the case of all other open vocalic endings. Today this pattern has been seriously upset in the living lexical items of the language, but it is still artificially enforced in singing certain types of traditional Japanese music and sometimes in reading *kanbun* texts.

It is also possible that in some way not yet clearly understood the appearance or non-appearance of voicing after Japanese open syllables ending in long vowels deriving from original Chinese *-ng* was determined at some stage in the history of the language by the tones of the words in Chinese, or by the pitch which they acquired in certain Japanese dialects. (There is also the completely unsolved but related problem of how such Chinese loanwords acquired their pitch contrasts in Japanese.) Thus, in the following group of morphemes, all of which are from original Chinese final *-ng* and all of which as a result have *-ō* in modern Japanese, some appear with voicing of a following *su*, *suru* and some do not. On the descriptive level in the modern Tokyo language the difference is to all appearances completely arbitrary:

with *zu, zuru:* *kō* "lecture," *chō* "grow," *shō* "produce"
with *su, suru:* *kō* "resist," *chō* "collect," *shō* "prove"

In Tokyo all these morphemes have the same pitch contrast pattern, typically *koó*, with the second half of the long vowel high; but in modern Kyoto those with *zu*, *zuru* have the entire vowel in level pitch, while those with *su*, *suru* have the first half high, the second low (*óo*). In the same way, in the following examples, from original Chinese final *-n* and *-m* resulting in Japanese *-n*, the Kyoto pitch contrasts correspond regularly with the appearance or non-appearance of the voicing:

	From Original Chinese		
	-n	*-n*	*-m*
with *zu, zuru* Tokyo *-eń, -ań* Kyoto *-en, -an*	*hen* "change"	*sen* "decoct, infuse"	*kan* "feel"
	-n	*-n*	*-n*
with *su, suru* Tokyo *-eń, -ań* Kyoto *-én, -án*	*hen* "incline (toward)"	*san* "produce"	*kan* "crown"

In the modern language those forms which originally took the voiced sets *zu, zuru* now are generally used with *jiru*, a curious back-formation which retains the voicing of *zu, zuru* but in which the first-syllable vocalism is based on the other inflectional forms of *suru*, such as for example the gerund *shite*.

If there is any original correlation of these two groups with the Chinese tones, it is difficult to discover; both *hen* "change" and *hen* "inclined (toward)," for example, belonged to the same Middle Chinese tone category.

Poorly understood though it remains, the frequent appearance of the syllabic nasal before intervocalic voiced stops is difficult to dissociate from another widespread phonetic phenomenon in Japanese, which for convenience may be termed "pre-nasalization." This pre-nasalization when considered together with the appearance of the syllabic nasal may also one day be the key to important re-interpretations of the phonetics if not the phonology of Old Japanese. The many suggestive indications which appear in the texts have yet to be treated in anything resembling the detail necessary to evolve a thoroughgoing hypothesis. In the meantime we must content ourselves with a brief account of several perceptive indications made over the past two decades, and hope that they will soon be followed up with the necessary substantive research.

In 1943 Asayama Nobuya brought together a certain amount of evidence in support of a novel thesis, namely that all the voiced consonants of Old Japanese, in all positions in which they were found in the language, were articulated with a nasal onset or pre-nasalized initial glide. The directions which he indicated were followed up in 1952 by Hamada Atsushi, who somewhat advanced the hypothesis and brought together more evidence, including some of the Sung and Ming period Chinese and Korean transcriptions of Japanese words and names. An essential part of the theory, to the limited extent that it was developed by these two scholars, is the thesis that the syllabic nasals in Japanese were essentially a development from these omnipresent pre-nasalized consonantal onsets.

Evidence for this theory is derived first of all from the well-attested consonantal pre-nasalization which is shown in virtually all the missionary transcriptions and other documents from the end of the sixteenth century. These make it clear that in both south Japan and in the Kyoto area vowels before voiced consonants, especially before *-g-* and *-d-* but also often before *-b-* and *-z-*, were strongly nasalized. Indeed, this feature of the language is specifically mentioned by Rodriguez in his account of Japanese grammar. By and large it escaped notice in the *kana* orthography, since it was a regularly present feature of articulation and hence needed no representation in the phonemic *kana* writing, but of course it at once came to the attention of foreigners attempting to "spell" the language in roman letters.

The following missionary transcriptions of personal and place names give a sample of the way this pre-nasalization appears in their records. Thus, for Kodera they wrote Condera; for *-dono* "lord" they wrote *-ndono* as in Morindono for Mōridono and Mioxindono for Miyoshidono; for Higo, Fingo; for Hyūga, Fiunga; for Kagoshima, Cangoxima; for Yamaguchi, (Y)amanguchi; for Azuchiyama, Anzuq(u)iama; and in perhaps the best-known example of all, their ubiquitous *bonze*, which in that form eventually entered most European languages, for *bōzu* "a Buddhist monk or priest."

Today this phenomenon is virtually unknown in the Kyoto dialect area, with the possible exception of a few anachronistically preserved place names, as for example the Kyoto street-name Banba, (lit.) "horse place," where the Tokyo equivalent is Baba. The frequent correlation of the *-n-* insertion phenomenon with a preceding long vowel, as in *yūbe* and *bōzu*, has not escaped Hamada's attention, and it too must play a part in any comprehensive theory still to be developed. As so often, the problem here is further complicated by the fact that *bōzu* is a Chinese loanword from *fang-chu*, and hence the *-n-* may also be considered etymological!

Even though it has now disappeared from the greater central and west Honshū region where it was evidently widespread in the late sixteenth century, this pre-nasalization has survived in two widely separated areas, some of the Tōhoku dialects of northern Honshū, especially in the dialect of the modern city of Sendai, and in the south in the dialect of the old Tosa region on Shikoku in present-day Kōchi Prefecture.

We have an unusually useful phonetic description of the modern Sendai dialect by the pioneer Japanese dialectician Ogura Shinpei (1882–1944), himself a native speaker of the dialect. Here all original unvoiced intervocalic stops and affricates become voiced, but the original voiced and voiceless distinction in these intervocalic consonants and affricates can nevertheless still be traced today by a nasalization of the vowel preceding the consonant in question. This phonemically significant vocalic nasalization appears in Sendai only in those cases where the original intervocalic consonant was voiced; thus,

Old Japanese	Sendai
hata "flag"	*hada*
hada "skin"	*hãda*
kutu "shoes"	*kɯd*^{z}*ɯ*
kuzu "waste"	*kɯ̃d*^{z}*ɯ*

In the Tosa dialect the phenomenon is less well described, but is said to be regular before *-d-* and *-g-*. For that matter the entire phenomenon should also probably be treated in connection with the articulation of intervocalic *-g-* as [ŋ] in the modern standard language of Tokyo, which is itself a very similar variety of pre-nasalization.

At any rate, the existence of this nasalized vowel or pre-nasalization phenomenon in the two widely separated areas of Sendai and Tosa, and its virtual absence from the intervening region, taken together with the strong historical evidence for its widespread occurrence in this same intervening area at an earlier period, at once suggests that we have here to deal with an intrusion by a non-pre-nasalizing dialect (and this at a fairly late period, certainly after 1600), which subsequently sundered an earlier uniformly pre-nasalizing language into the two discontinuous segments preserved today, the one in Sendai in the north and the other in Tosa in the south. Such a pattern of dialect development is well attested in other areas, and indeed is the kind of centrifugal spread with subsequent fragmentation into discontinuous segments which Yanagita Kunio demonstrated in his pioneer study of the distribution of dialect forms for "snail," mentioned above. But further pursuit of this aspect of the problem (which does not derive from Asayama and Hamada) would take us too far afield, and would also require more detailed data than are now available.

To sum up, the Asayama-Hamada theory, building on this type of evidence, has suggested that the generalized pre-nasalization of intervocalic voiced consonants so well attested at the end of the sixteenth century may with confidence be pushed fairly far back into the history of the language, and indeed that it was a "regular and typical" feature of the phonetic articulation of Old Japanese. Finally, Hamada has suggested that in the Old Japanese period this variety of articulation ultimately arose through imitation, on the part of the Sinophile Japanese upper classes, of the T'ang pre-nasalization of certain voiced stops in the dialect of Ch'ang-an, capital of T'ang China, between the seventh and the eighth centuries. As Hamada puts it, in the Old Japanese period the intoxication of the Japanese with Chinese things was at least as great as their post–World War II infatuation with things American. Judging from our experiences with the latter phenomenon, virtually anything could have resulted! These aspects of his theory aside, the suggestion that this pre-nasalization is far older than the Muromachi period, and the hint that it may have resulted from a fad for the new *kan'on* pronunciation, which reflected this same Ch'ang-an pre-nasalization, are both worthy of more serious attention than they have received to date.

One way in which this phenomenon of pre-nasalization and the development of the syllabic nasal from the loss of the vowel in combinations like *-mi* and *-ni* may both be utilized to help clarify the history of certain Old Japanese forms and their modern developments has been pointed out by Ōno Susumu in many perceptive notes to the recent edition of the *Man'yōshū* in which he participated. In many cases he most convincingly uses the following developments to explain either forms in the received text or the modern developments of forms in the text: (1) loss of vowel following *-m-*, *-n-*, or *-F-*; (2) secondary voicing of the consonant which because of this loss of vowel now came directly after the *-m-* or *-n-*; with *-F-* he prefers a slightly different sequence, but it would be possible to consider these changes too as part of the same general pattern; (3) the *-m-* or *-n-* and the voiced consonant they precede fall together with the pre-nasalized version of this voiced consonant; (4) the pre-nasalized voiced consonants shift, often in fairly recent times, to ordinary voiced consonants. Thus, *ajiro* < *aziro*, *azirö* "a wickerwork fish trap," < *ami* "net" + *sirö* "replacement for something," > *amsirö* > *amzirö* > *a*^{n}*zirö*; *siranisu* "not knowing," > *siransu* > *siranzu* > *sira*^{n}*zu* > *sirazu*; *yuzuwe* "upper part of a bow," < *yu*^{n}*zuwe* < *yumzuwe* <

yumsuwe < *yumisuwe* "bow" + "extremity"; *oFoForu* "drown" > *o*^{m}*Foru* > *o*^{m}*boru* > *oboru.* The parallel of such developments with, for example, the well attested development of the modern grammatical particle *de* from an earlier sequence *ni te* is obvious.

Generally speaking, the many important changes in the late Old Japanese period, of which the above is only a brief account, were directly responsible for much of the appearance of modern Japanese. They were mostly changes in pronunciation accompanied by or later giving rise to structural changes; they happened in different dialects at slightly different times; and they were greatly complicated by dialect borrowings and later admixtures of both shifted and unshifted forms into one and the same dialect.

The period from the thirteenth down to and including the sixteenth century may be termed Middle Japanese; it is chiefly notable for the development of sets of long vowels from the vowel sequences or clusters which the changes noted above in late Old Japanese had brought into being. Continuing pressure was exerted on the Japanese sound system by the growing numbers of Chinese loanwords, now entering from Chinese dialects which had themselves greatly changed since the Sui- and T'ang-period Middle Chinese norms of earlier days. From this time on we are greatly assisted in the description of the language by the happy fact that the European missionaries of the late sixteenth and early seventeenth centuries were avid students of Japanese. The materials which they prepared for their converts, for their own language study, and for the use of their successors provide us with remarkably explicit records of the Japanese of their time.

Several important changes both in pronunciation and in phonological structure took place during the Middle Japanese period, resulting in the phonological situation of which a sketch will be given shortly below. In a change in pronunciation, which initially did not affect the structure of the language, *t-* and *d-* before *-i* came to be pronounced as the affricates [t$^{\check{s}}$] and [d$^{\check{z}}$], and before *-u* as the affricates [t^{s}] and [d^{z}]. Later, [ži] and [d$^{\check{z}}$i] fell together as did also [zu] and [d^{z}u], which of course then introduced changes into the structural patterns of the language.

Most important of all were a series of changes involving the vowel sequences which had arisen in the last part of the preceding period, chiefly through the shift of intervocalic *-F-* to zero. In other contexts this phoneme remained as a bilabial fricative, or as a dentilabial in some dialects, with replacement by voiceless *p* or voiced *b* stops under certain circumstances not yet completely described. These changes were of particular importance since they affected the shape of a large number of Chinese loanwords already in the language, and since they determined the phonetic shape of the many more which were to be introduced later. Even though they are typically characterized by the phonological developments in the Chinese loanwords, they were by no means restricted to this single area of the vocabulary, but were far-reaching structural changes affecting the entire language.

An idea of what happened can best be obtained by tracing two typical patterns of development:

(1) In Chinese loanwords deriving from Chinese final *-ng* with late Old or early Middle Japanese nasalized *-ũ*, of the type *keũ*, the final *-ũ* was denasalized and fell together with Chinese loanwords deriving from Chinese final *-p* with late Old or early Middle Japanese *-Fu*, of the type *keFu*, when this intervocalic *-F-* shifted to zero. From this point on all Middle Japanese forms of the *keu*-type underwent the same sequence of changes regardless of their origins, Chinese loanwords and native Japanese morphemes alike. At the beginning of this sequence of changes the vowel *-e-* served as a nucleus, and we can hence assume that it was in some way (perhaps pitch, or stress?) more prominent than the *-u* which now directly followed it. At any rate, for some reason of special prominence in articulation or other factor of acoustic importance it served as the point of reference to which both the preceding *k-* and the following *-u* were now assimilated. The result was the first intermediate stage [*k*eo], where [*k*] represents a fronted velar stop partly assimilated to the point of articulation of the *-e-*, and the *-o* is the earlier final *-u* which now had been lowered to the same position as the *-e-*. At this point the shift was still simply a change in pronunciation. Immediately following this stage the earlier factor of syllabic prominence, whatever it may have been, which set the *-e-* apart as a point of reference for this sequence was removed, and the once nuclear *-e-* itself was now assimilated to the position of articulation of the following (and itself secondary) *-o*, resulting in the second intermediate stage [*k*oo]. At this point the fronted velar [*k*] which until the shift of *-e-* > *-o-* had been simply an allophone of /k/ without structural significance came to contrast significantly with the ordinary velar [k] before *-o*, and hence assumed the role of a new structural unit in the language. With the completion of this sequence of sound changes the language had gained a new series of phonological

contrasts, not only for the velars but for several other series of stops as well, so that *k*- contrasts with *ky*-, *g*- with *gy*-, *n*- with *ny*-, *h*- with *hy*-, *p*- with *py*-, *b*- with *by*-, *m*- with *my*-, *r*- with *ry*-, and *s*- with *sy*-, *z*- with *zy*-, *t*- with *ty*-, and *d*- with *dy*-. In these last four dental sets the phonological patterning and the value of the allomorphs of these combinations with -*y*- would, at future stages of the language as well as in Middle Japanese, be susceptible to different kinds of analysis and interpretation. From this point on in the history of the language, then, one of the most important phonological oppositions in Japanese would be between sequences of the type *ko* and sequences of the type *kyo*, where *ky*- is the notation for a fronted, palatalized stop.

Meanwhile, the vowel sequence *o* + *o* resulting from this change came to function structurally as a long vowel contrasting with short *o*. The phonological role of the resulting long syllabic nuclei, and the question of whether they are to be analyzed as long vowels or as sequences of identical short vowels are slightly different problems for each stage of the language, and what has been written [*k*oo] above is, for all practical purposes, [*k*o:].

(2) In other forms of similar origin but with dental or apical initials, or other initials involving dental or apical affricate elements, the changes in Middle Japanese were of the same general type except that the dental or apical stop initials shifted to affricates in the final stage of the change, thus [teFu] or [teũ] > [teu] > [*t*eo] > [t^{s}o:]. Here again the exact form of the description of the sound change depends to a great extent on the form which the analysis of the results takes; if in Middle Japanese, as is also possible for modern Japanese, we interpret the affricate initial resulting as a sequence of /t/ + /-y-/, then [t^{s}o:] is /tyoo/, and the essential parallelism with the earlier sequence of changes resulting in *kyoo* is emphasized.

At the same time, the sequence *ou* shifted by simple assimilation to a uniform sequence *oo*, which from this point on falls together with the *oo* deriving from *eu*.

Meanwhile, and in much the same way as happened with *eu*, the vowel sequence *au* shifted to a new unit in the Middle Japanese phonological inventory, a long [ɔ:], or, depending on the analysis, the sequence *ɔɔ*. The missionary transcriptions of the time kept this distinct from [o:], representing [ɔ:] with the graph *ǒ* and [o:] with the graph *ô*. The sequence *uu* either remained as such or became the long vowel [u:], again depending on the analysis preferred; the missionary orthography distinguished this from the short variety by the graph *ǔ*.

Among the most far-reaching results of these changes in Middle Japanese was the falling together into completely homophonous forms of a considerable number of Chinese loanwords which until this time had been kept distinct, and a consequent increase in the number of homophonous morphemes in the language. But as already mentioned, these changes also affected native Japanese morphemes, and although thousands of examples from the Chinese loanword portion of the vocabulary could be cited, it is also possible to illustrate them with Japanese forms. Thus, for example, the shift involving original *eu* and *eo* may be observed in *keFu* > *kyō* "today," from *ke-* "this" and *-Fu*, an allomorph of *Fi* "day"; *meoto* > *myōto* "husband and wife," from *me* "woman" and *oto* "husband"; *te wo no* > *teuna* > *chōna* "an adze"; and *-seu* > *-shō*, verbal suffix for the tentative mood.

In much the same way in which the new contrasting sets of consonants plus *-y-* came to play a significant feature in the language in the Middle Japanese period, so also a similar series involving *-w-* was introduced following *k-* and *g-* only, producing for the velars a set of labiovelar *kw-* and *gw-* contrasting both with plain *k-* and *g-* and with fronted *ky-* and *gy-*.

The phonological structure of the morpheme at the end of the Middle Japanese period may be summarized, then, as follows:

There were five vowels, *a*, *i*, *u*, *e*, and *o*, all short (or unit) vowels, plus the long vowels *u*: and *o*: (or the sequence *uu* and *oo*) and the long vowel ɔ: (or ɔɔ). Of these *a*, *i*, and *u* appeared with zero (or /’/) initial; *e* was always preceded by *y* and *o* by *w*, while these two consonants were found only before the following vowels: *y* before *a*, *u*, *e*, *o*, *u*:, *o*:, and ɔ:, and *w* before *a*, *o*, *o*:, and ɔ:.

According to their occurrence in combination with the other consonants the vowels fall into two major sets, set I, consisting of all the vowels, before which *k*, *g*, *s*, *t*, *n*, *F*, *b*, *p*, and *r* were found, and set II, consisting of set I minus *u*:, before which *z*, *d*, and *m* were found. In the new Middle Japanese combinations with *-y-* all set I vowels appeared following *k*, *g*, *s*, *z*, *t*, *d*, + *-y-* (the allophones of these combinations as already noted above, must of course be kept in mind, thus /t + y/ = [$\mathrm{t}^{\check{s}}$], etc.). With the labials *F*, *b*, *p*, and *m* only the vowels *a*, *o*, *u*, *o*: and ɔ: were found following *-y-*; with *n* + *-y-* only *a*, *o*, *u*, *u*:, and *o*:; and with *r* + *-y-* only *a*, *o*, *u*, *u*:, *o*:, and ɔ:. In addition, following *k* and *g* the labial semivowel *-w-* was also found, but these combinations only occurred before *a*, *o*, and ɔ:.

From this late Middle Japanese phonology it was a comparatively simple set of steps to any of the modern varieties of Japanese, including the modern standard language of Tokyo, but the exact developments depend on the dialect being described. The modern standard language of Tokyo, like the modern Kyoto dialect, is very much a composite from many diverse sources, so that it is impossible to do more than sketch the main outlines of the problem.

The allophones [š] of /s/ and [ž] of /z/ before /e/ were leveled out to become [s] and [z], conforming to their allophones before the other vowels. The combinations *kw-* and *gw-* were shifted to simple *k-* and *g-*, but in Tokyo at least this happened fairly late, in some cases not until well into the present century. The combinations *ye* and *wo* were simplified to *e* and *o*, and intervocalic *g* in Tokyo distinctively acquired (or perhaps maintained?) a nasalized pronunciation as [ŋ], though the once regular pattern of this development is now slightly obscured by loanwords. The descendant of Old Japanese *F* had already shifted in several ways in intervocalic position; initially in the morpheme or utterance it now generally became [h] before all the vowels except /u/ where it retained its bilabial articulation in most varieties of speech, though sometimes here too it became [h]; in Tokyo before /i/ it often became [ç], so that in this position it sometimes fell together with /s/ before /i/, which was [š], or, according to another analysis, with /š/.

Many dialects also developed widespread palatalization, which together with syncope produced such developments as *sore wa* "that (plus grammatical particle)" > Tokyo *sorya*, and *sore de wa* "in that case" > Tokyo *soreja*.

Surviving dissimilar vowel sequences such as *ae*, *ai*, and *ei* were leveled in many dialects under a uniform [eː], and in modern Tokyo today *ei* is in free variation with [eː], although the orthography (and our transcription) preserves the earlier sequence which is still heard, especially in careful, slow speech. In modern Tokyo, too, the distinctions between *ae* and *ai*, and those between *au* and *ao*, tend to collapse in rapid speech, so that *kaer-u* "returns" rhymes with *hair-u* "enters," and *ka-u* "buys" is homophonous with *kao* "face"; and in the same way *oe* and *oi* and *ue* and *ui* tend not to be kept apart, so that *koe* "voice" generally becomes homophonous with *koi* "carp," and *tsui* "unintentionally" with *tsue* "staff." But unlike Kyoto, Tokyo still tends to keep *ou* distinct from *oo*, so that *to-u* "asks" does not rhyme with *tō* "ten."

Several solutions are possible for the problem of stating the phonemic structure of the modern dialect of Tokyo, largely because different phonological treatments are possible for the prepalatal spirant [š] and the affricates [ts], [t$^{\check{s}}$], and [d$^{\check{z}}$]. There are three main possibilities. They may be treated as unit phonemes, with limited distribution *vis-à-vis* the vowels which follow them. They may be treated in such a way that, for example, [ts] is the allophone of /t/ before /u/, to which position it is almost (but unfortunately not completely) limited in the dialect; and in the same way [š] may be treated as /s/ before /i/, etc. Or, in what is in a sense only a further development of this second treatment, [š] may be treated as /s/ plus /y/ before /i/, and so on. The oldest system for the transcription of Japanese into roman letters still in current use, that devised by the American missionary James Curtis Hepburn (1815–1911) in 1885, is actually closest to the first of these three possible solutions, and it is interesting to note that it is by this same token probably also closest to the phonemic solution that most linguists would prefer today. The so-called National Romanization promulgated by a Japanese government decree in 1937 is essentially the second of the above solutions; it is superficially neat, and allows a handy one-to-one correlation with the *kana* syllabaries, but its economy and symmetry are linguistically deceptive. This 1937 system, officially known in Japan as the *(Sin-)Kunreisiki* or "(New) cabinet ordinance system" was based on a somewhat earlier romanization scheme, the *Nipponsiki* or "Japanese style," from *Nihon* "Japan" in its emphatic form *Nippon* + *shiki* "style." (Both these systems had in common the spelling *si* for the sequence we write here as *shi.*) The 1937 version differed from the earlier in, among other things, abandoning its graphic distinction between *k* and *kw*, and also that between *z* and *d* before *i* and *y*, in which the *Nipponsiki* had followed the historical *kana* orthography, as well as in writing the long vowels with the circumflex (*ô*) instead of the macron (*ō*). Thus the word which according to the Hepburn system used in this book we would spell *rōmaji* "roman letters, romanization" (< *rōma* "Rome" + *ji* "written graph, letter") would be written *rômazi* in the *Kunreisiki* and *rōmadi* in the *Nipponsiki* style of romanization.

The phonemes of modern Japanese, then, according to the first of these alternatives (and incidentally more or less according to the Hepburn romanization used in this book for modern Japanese) consist of the following classes of sounds: 1) /i/ the syllabic high front vowels; 2) /e/ the mid front vowels; 3) /a/ the low vowels; 4) /o/ the mid back vowels; 5) /u/ the syllabic high back vowels; 6) /-n/ the syllabic nasals; 7) /p/ the voiceless labial stops; 8) /t/ the voiceless dental stops; 9) /k/ the voiceless velar stops; 10) /t^{s}/ the voiceless dental or denti-alveolar affricates; 11) /$t^{\check{s}}$/ the voiceless prepalatal affricates; 12) /s/ the voiceless alveolar spirants; 13) /š/ the voiceless prepalatal spirants; 14) /h/ the non-lingual spirants; 15) /b/ the voiced labial stops; 16) /d/ the voiced dental stops; 17) /g/ the voiced velar stops; 18) /$d^{\check{z}}$/ the voiced prepalatal affricates; 19) /z/ the voiced alveolar spirants; 20) /r/ the flaps; 21) /m/ the non-syllabic labial nasals; 22) /n/ the non-syllabic dental nasals; 23) /y/ the non-syllabic high front vowels; 24) /w/ the non-syllabic high back vowels.

This list as it stands is only a minimum phonological inventory; to it must of course be added statements about the occurrences of phonemes together or doubled (long vowels and consonants, etc.), as well as supplementary statements about junctures, stress, and above all, pitch, in addition to statements covering the morphophonemic changes. It is also possible, and probably necessary, to add to the above minimum inventory other items such as a glottal stop /ˀ/, an /ŋ/ phoneme contrasting with /g/, and even other phonemes in free variation with others above, thus, for example, a class of pre-velar spirants /x/ in free variation with /h/ in certain environments, or a class of voiced prepalatal spirants /ž/ in free alternation with /$d^{\check{z}}$/. Precisely what additions are to be made to the above minimum list are matters partly of ideolect, and partly of individual taste and preference on the part of the linguist.

The morphophonemic changes in modern Tokyo Japanese are complex and interesting; but thanks to the definitive treatment by Martin we need not concern ourselves further with them here, except to note that they make it useful to set up additional phonological units over and above the minimum inventory in order to facilitate the morphophonemic statements. These generally include the treatment of all or most geminate consonant sequences such as /pp, ss/ as combinations with a morphophoneme //q//, thus //qp, qs//. They also lead to differences in the analysis of the syllabic nasal, which causes theoretical difficulties in most treatments because its [m] allophone is otherwise represented in the system as the phoneme /m/.

All this has dealt only with the segmental phonemes of the language; in addition there are units of juncture and stress, and, most importantly in Japanese, units of distinctive pitch contrast. Once again the great amount of detailed work which has been published on these suprasegmental features of Japanese makes it unnecessary to give details here concerning juncture and stress; and even the extremely important phenomenon of the Japanese system of pitch contrasts can safely be treated in broad outline. The great detail in which Japanese scholars have studied the Japanese pitch system, particularly as a critical factor in dialect differentiation, has already been mentioned. We shall content ourselves here with brief characterizations of three typical systems.

In these systems, and probably in all of the modern pitch systems, the critical factor is the presence or absence, in a given sequence of syllables, of a "drop" (*sagarime*) in the pitch of the voice from a high level to a low level, and if such a "drop" is present, its precise location, i.e., where along the articulatory chain it is found. Morphemes which in isolation are without such a "drop" may prove to have one, or to border upon one, when found in larger syntactic contexts.

Here we indicate all high syllables with the acute accent (*á*), including the high syllable at the termination of which a "drop" is found; the syllable immediately subsequent to this "drop" is here marked with the grave (*à*), and the other low syllables are left unmarked. Japanese scholars generally prefer a somewhat more expressive and graphic notation which attempts to indicate the actual rise-and-fall contours of the voice. Thus a typical sequence in which a low syllable is followed by a high one, at the conclusion of which there is a "drop" and a following third syllable which again is low, would be *haná gà*, or in the usual Japanese notation, $ha\ulcorner\overline{na}\urcorner ga$.

Classified according to pitch, Tokyo has two types of one-syllable morphemes; both are identical in isolation (*hi* "sun," *hi* "fire"), but the first in a larger syntactic context is followed by a high pitch (*hi gá détà* "the sun has come out") and the second in such a context is itself high followed by a "drop" (*hí gà deta* "fire has broken out"). Therefore, for *n*-syllable morphemes, the Tokyo dialect has $n + 1$ pitch patterns. In the first of these types, everything from the second syllable on is high, including affixed particles, until the sequence terminates and at its conclusion falls under other rules governing the pitch of phrase-final elements. In the other type, everything from the second syllable on is high until the drop, after which everything is low until again other factors intervene. Phrases and larger syntactic units impose other patterns on the pitch structure of the elements which go to make them up (*haná gá* + *takáì* > *hanágátákáì* "[he has] a high nose," i.e. "he is proud"; *hí gà* + *tsúìta* > *hígàtsuita* "the fire has ignited"; *haná gà saítá* > *hanágasaita* "the flowers have bloomed";

muttsú > *árù* > *muttsúárù* "(I) have six," but *múttsúmòaru* "(I) have as many as six"; etc.); a complete description of all that these situations involve would take many pages.

The examples in Table 3 will give an idea of the pitch occurrences in the standard language of Tokyo for typical morphemes both in isolation and followed by the grammatical particle *ga*.

In the modern dialect of the city of Kyoto the pitch system is considerably more complicated than in Tokyo. Thus, taking only two-syllable morphemes as an example, there are four distinct pitch patterns:

	In Isolation	Followed by *ga*
1) *hana* "nose"	*háná*	*háná gá*
2) *umi* "sea"	*umí*	*umi gá*
3) *ame* "rain"	*aḿe*	*amé ga*
4) *hana* "flower"	*hána*	*hána ga*

Here in 1) the entire morpheme is high and level, including any following particles; in 2) the last syllable only is high, if without a particle, or low and the following particle high if there is one; in 3) in isolation there is a sharp "drop," more rapid than the Tokyo "drop," between the first and second syllables, and in the example given, during the articulation of the *-m-*, or the second syllable is high and the drop, more like the Tokyo "drop," takes place after the *-e-* of the *-me-* sequence and before the particle, which is low; and in 4) the initial syllable of the morpheme only is high followed by a "drop," regardless of syntactic context. Correspondingly longer morphemes have correspondingly more complex pitch patterns in Kyoto, so that there are six patterns for three-syllable morphemes, seven patterns for four-syllable morphemes, etc. In all the Kyoto-type dialects it is necessary to have two items of data in order to specify the pitch configuration of a phrase—whether the phrase starts on a low or a high pitch, and where if at all the phrase contains a fall in pitch. The modifications of these patterns in larger syntactic contexts involving phrase and sentence elements are correspondingly numerous.

As an example of a rather different pitch system in a widely divergent dialect, that of Kagoshima may be noted briefly. Since the grammatical particle *ga* is foreign to this dialect a comparable context can be devised with the copula *da*. (Somewhat different rules obtain for sequences of noun plus enclitic particles, when the phrase rather than the morpheme is the critical unit.) All morphemes in this dialect fall

TABLE 3

Typical Pitch Patterns in Tokyo Speech

	In Isolation	Followed by *ga*
na "name"	*na*	*na gá*
hi "sun, day"	*hi*	*hi gá*
na "rape seed"	*na*	*ná gà*
hi "fire"	*hi*	*hí gà*
hana "nose" (and following the same pattern, *ame* "candy," *fur-u* "brandish")	*haná*	*haná gá*
hana "flower" (so also *yama* "mountain," *kawa* "river," *hashi* "bridge")	*haná*	*haná gà*
umi "sea" (so also *hashi* "chopsticks," *ame* "rain," *saru* "monkey," *fur-u* "fall down")	*úmì*	*úmì ga*
sakura "flowering cherry" (so also *katachi* "form," *hana mo* "even a nose," *ame mo* "even candy")	*sakúrá*	*sakúrá gá*
atama "head" (so also *otoko* "man," *onna* "woman")	*atámá*	*atámá gà*
kokoro "heart" (so also *omoi* "thought," *shiro-i* "white")	*kokóro*	*kokórò gà*
kaiko "silkworm" (so also *tsubaki* "camellia," *deppa* "buckteeth")	*káìko*	*káìko ga*
sanpatsu "hair-cut" (so also *gakkō* "school," *shinbun* "newspaper")	*sańpátsú*	*sańpátsú gá*
otōto "younger brother" (so also *imōto* "younger sister")	*otóótó*	*otóótó gà*
tomarigi "(wooden) perch" (so also *kakur-u* "hide," *suzushi-i* "cool")	*tomárígì*	*tomárígì ga*
yamayama "mountains" (so also *kuniguni* "countries," *irogami* "colored paper")	*yamáyàma*	*yamáyàma ga*
Fujisan (place name) (so also *matsutake* "a large edible mushroom," *konban* "this evening")	*fújìsan*	*fújìsan ga*

into two patterns with respect to pitch. In the first the ultimate syllable of the morpheme is high; in the second the penultimate syllable is high, regardless of whether the morpheme is in isolation or followed by *da*. In one-syllable morphemes these two classes can also be distinguished, since in some such morphemes (*ńà* "name") only the initial phoneme *n-* is high, and there is a drop before the *-a*, while in the second (*ńá* "rape [seed]") the entire sequence *na* is high. In this dialect the following are representative samples:

	In Isolation	Followed by the Copula
hana "flower"	*haná*	*haná dà*
hana "nose"	*hána*	*hánà da*
kagaribi "bonfire"	*kagaríbì*	*kagaríbì da*
irogami "colored paper"	*irogamí*	*irogamí dà*

From the sound-systems of the early centuries of the Christian era, available to us only through the techniques of historical reconstruction, to the present-day speech of the numerous dialect communities of modern Japan, still separate but rapidly falling under the hegemony of the modern standard language of Tokyo, is a span of time and cultural experience of breath-taking magnitude. The surprising thing is not that there are numerous blind spots in our knowledge of these processes of change and development, but rather that we are able to put the story together at all into a continuous narrative with a few major gaps. And there is little doubt that as the gaps which now exist are gradually filled one by one the data which are uncovered in each case will do their part to clarify other areas in the over-all development of the sounds of the Japanese language.

Chapter 6

Loanwords

Languages are greedy. Probably no language has ever been content solely with the lexical materials available from its own resources; and perhaps every language has from time to time increased the range and span of its vocabulary with what are generally called loanwords—imitations or approximations of the sound and sense of words from other languages. The problems presented by such forms naturally become more complex as we go into the history of any language, so that eventually it becomes difficult or impossible to distinguish between lexical items which are part of the original word stock and items which have been borrowed from other languages. Indeed the farther back in time we go the more the concepts "original" and "borrowed" tend to blur together. We have already seen something of this problem as it arises in a consideration of the possible cognate relationships of Japanese, especially with Korean and the other Altaic languages, and have noted the great difficulty experienced here in distinguishing to any satisfactory degree of certainty between original inherited lexical items and loanwords.

If the phenomenon of the loanword is common to all languages, this does not mean that all languages have reacted in the same way to the typical situation out of which the loanword develops. Some have been noticeably hostile to the introduction of such forms; they have tended to avoid the imitation of foreign lexical items. Even under strong cultural stimulus to adopt foreign terms they have preferred to translate them into new arrangements of their own original lexical materials. Such forms are loan translations, and hence in a sense part of the over-all loanword phenomenon, but they are certainly an attenuation of the process as usually understood.

Chinese, in all of its historical forms and modern Chinese as well, has generally reacted to outside linguistic stimulus in this extremely conservative fashion, preferring to translate new lexical items made necessary by its contacts with the outside world, rather than to take them over as loanwords. Classical Tibetan is another remarkable example of this same cautious pattern of linguistic reaction. In spite of the tremendous impact of Mahāyāna Buddhism on Tibetan culture and civilization, and in spite of the painstaking translation of the entire Northern Buddhist canon into classical Tibetan, the number of direct loanwords from Indic in Tibetan, as distinct from the extremely numerous loan translations, can be counted on the fingers of both hands.

Japanese, for as much of its history as is known to us, has always stood at precisely the opposite pole. It would be difficult to find another language in the world—excepting perhaps English during the first few centuries after the Norman invasion—which has been as hospitable to loanwords as has Japanese. At all times in their history the Japanese have avidly introduced new vocabulary items into their own lexical stock, where great numbers of them have remained as permanent evidence for many of Japan's contacts with the always remote outside world. Like St. Paul's Athenians, those Japanese wealthy enough and idle enough to be able to indulge themselves have often "spent their time in nothing else, but either to tell or to hear some new thing." In the Heian period the last word of praise for virtually anything was to describe it as *ima meku* "having a modern air." This expression neatly sums up much of the traditional upper-class Japanese approach to the new and the foreign, and goes far toward helping to explain the massive additions of loanwords which the language has generally welcomed.

Many of the older layers of loanwords involving Korean and the other Altaic languages are, as we have seen, all but impossible to separate; and the same is true of some of the earliest Chinese elements in the Japanese vocabulary. In 1926 Bernhard Karlgren suggested a considerable list of these old Chinese loanwords in Japanese, including *siFo* "salt," *kaFiko* "silkworm," *sugi* "cryptomeria," *tog-u* "grind, polish," *Fag-u* "flay," *tuk-u* "build," *sak-u* "cleave," *kaki* "hedge," *natu* "summer," *yuka* "threshold," *iFe* "house," *sato* "village," *mugi* "wheat," *takë* "bamboo," *Funë* "boat, vessel," *kama* "pot," *kama* "sickle," *sinë* "rice," *kuni* "state," *kinu* "silk stuff," *uma* "horse," and *umë* "flowering plum."

It is always possible to question individual items on this list, and the intersection of certain items here with some mentioned earlier in the discussion of possible Altaic elements in Japanese will be noticed at once, showing that these problems are never simple. But it is probably not necessary to go as far as some modern Japanese scholars have done and attempt to refute almost this entire corpus. By and large Karlgren's list gives a good idea of the type and variety of these old Chinese loans in Japanese, and although items of detail may be questioned it remains secure as a body of evidence. In fact, it is not difficult to add items to it; for example, is not Old Japanese *Faka* "grave" to be connected with Old Chinese *mâg* "id."? Japanese funeral customs were under important continental influence from earliest times, and such a loan fits in well with our knowledge of the anthropological and historical background.

Kamei Takashi, the modern Japanese scholar who has been most vigorous in attempting to refute virtually all these suspected old Chinese loanwords in Japanese, has himself curiously enough suggested another most convincing example, Old Japanese *koromo* "garment" and Old Chinese *kli̯äm* "a variety of silk cloth." Unfortunately most discussion of the rights and wrongs of such loanwords is ink spilled in vain, since the very nature of the problem makes it extremely difficult to distinguish between the possible and the probable. Many such etymologies are quite possible; of these, many too are quite probable; but beyond that point one can scarcely go with any certainty.

An interesting and important early loanword from Korean almost certainly lurks in the Old Japanese terminology for the quadri-grade system of T'ang official ranks, a good example of the activity of both Korean and Chinese linguistic elements in early Japan. The Japanese adopted from T'ang China a complex system of official rankings and the terminology to go with it; the system is too elaborate to present here, but in essence it provided a terminological grid divided into four horizontal levels of rank intersecting a large number of vertical offices and bureaus, with four different terms for the graded ranks in each of these. This total of 4 × n terms was further capable of modification in many cases by morphemes meaning "greater," "lesser," "junior grade," etc., giving a total system of great complexity and terminological variety. When it was adopted in Japan only the Chinese characters for all these terms were taken over intact; for the morphemes accompanying them (their "readings") Japanese *kami* "head," *suke* "assistant," *jō* < *zyou* "lieutenant," and *sakan* < *sakwan* "secretary" were used in all cases, regardless of the Chinese originals which the system preserved only in writing. Thus, for different official functions, the original T'ang system was, in two typical cases, divided as follows:

	Office 1	Office 2 . . . (etc.)
Grade 1	*t'ou* "head"	*ch'ing* "lord"
Grade 2	*chu* "helper"	*fu* "supporter"
Grade 3	*yün* "confider"	*ch'eng* "aider"
Grade 4	*shu* "belonger"	*lu* "recorder"

In Japan the Chinese characters for *t'ou* and *ch'ing*, for example, were kept carefully distinct in writing, depending on the proper assignment within the system of the official to whom they referred, but both were read *kami; chu* and *fu* were kept apart in writing, but both were read *suke; yün* and *ch'eng* were both read *jō;* and *shu* and *lu* were both read *sakan;* and so on throughout the many more such sets in the system. Not only was the polysyllabic *sakan* used for single Chinese characters, but titles written with two Chinese characters, as for example *hōgan* "adjudicating official," were in this same system sometimes read simply *jō* in Japan.

The Japanese morpheme *jō* is a loan, and probably goes with the Chinese *ch'eng* cited in the table above. But the most curious item is *sakan* < *sakwan*, a polysyllabic morpheme and also apparently a loanword, but from what? The most probable solution is to associate it with Korean *sakwan*, itself an old Chinese loanword in Korean, from Middle Chinese *ṣi-kuân* "historiographer." (The phonetics of the Japanese loan are partly explained by the fact that the morpheme *ṣi* had, in Old Chinese, the vowel *-ə-*.) This fits in well with the duties of fourth-grade officials, who throughout the system were concerned with the production and custody of written records. Other old Korean loans which are often cited are *tera* "Buddhist temple" from *cël*, and *patchi* "a variety of long trousers, popular ca. 1760," from *paci;* both, because of their cultural correlations, have never been suspected of coming from a stock of possible cognates common to both languages.

Loanwords from Ainu are neither as plentiful nor as important as one might think. A generation ago there was a vogue for attempting to find Ainu "etymologies" for many otherwise unexplained items in the Japanese toponymy, but today such theories are generally held to have been excessive. Certainly a few items, such as the recurrent *-betsu* of many northern Japanese place names, are to be traced to Ainu—in this case to Ainu *pét* "river"—but one no longer immediately assumes an Ainu original for all otherwise obscure Japanese place names.

Most of the clearly identifiable Ainu loans in modern Japanese have to do with the ecology of the northern regions. Modern Japanese *atsushi* referred originally to a coarse fabric woven from plant fibers by the Ainus, and has since been extended to cover a similar fabric produced in the region south of Osaka; it is from *'áttus*, the Ainu name for this kind of fabric. Modern *sake* "salmon trout, dog salmon" is a hypercorrect form for an original and still surviving *shake*, eventually from Ainu *cukipé*. The word *ottosei* "the fur seal" is from Ainu *'unéw*, but through a Chinese intermediary *wa-na-*(*ch'i*), which helps to explain the considerable divergence in the phonetic shape of the Japanese form which is based on a "spelling pronunciation" of the Chinese characters used in the original transcription. (Since *wa-na-ch'i* is recorded as early as the late Ming–early Ch'ing lexical text the *Cheng-tzu-t'ung*, it is probably the earliest known example of an Ainu word in phonetic transcription.) Ainu *rákko* underlies *rakko* "sea-otter," and the doublet *kobu, konbu* "edible kelp," already discussed above in connection with the history of the syllabic nasal, is often said to be a loan from Ainu, though the modern Ainu forms, *kónpu* and the like, look more as if the borrowing had been in the other direction.

The coming of the Portuguese in the mid-sixteenth century brought a flood of new words, most of them related to the material culture of Europe, to which the Japanese upper classes reacted with their customary enthusiasm for the new and the different. The following list includes only some of the more important Portuguese loanwords which have survived into the modern language: *kappa* "raincoat" from *capa; pan* "bread" from *pão; tabako* "cigarette" from *tabaco; jiban,* also *juban* "undershirt, underwear" from *gibão* "doublet"; *rasha* "woollen cloth" from *raxa; botan* "button" from *botão; karuta* "playing cards" from *carta; konpētō* "sweets" from *confeito;* and *kasutera* "a sweet sponge-cake confection" from *castella* "Castile." *Biidoro* "glass" from *vidro* was common a generation ago but now has been virtually driven out by *garasu* from Dutch *glas.*

During the flourishing days of the old Roman Catholic mission to Japan a great number of religious terms entered the language and remained active for a brief period. One such was *bateren* "priest" from *padre.* There appears to be no explanation forthcoming from Romance linguistics for the final *-n* of the Middle Japanese form, which probably resulted from a "spelling pronunciation" based upon the Chinese characters with which the word was transcribed. It would help considerably in studying this problem if we knew whether the transcription (Chinese *pan-t'ien-lien*) was made first in Japan or in China, and if in China, precisely where. Also common were such terms as *iruman* "catechumen, lay brother" from *irmão, orashio* "prayer" from *oracio,* and *rozario* "rosary" from *rosario.*

With the ruthless extermination of Roman Catholicism from seventeenth-century Japan words such as these became, for the few who attempted to keep their new faith alive despite the persecution, precious and secret but no longer very well understood talismans of their religion; but for most of the nation they became frightening symbols of a foreign system that now meant only terrible torture and death. Given these two extremes, it is little wonder that as words they soon disappeared from the language.

Perhaps the most widespread of all the Portuguese loans surviving today is *tenpura,* the term for the popular method of deep-frying battercoated fish and vegetables, from *tempero* "seasoning," or from some form of the verb *temperar* "to temper, mix, mingle properly," and hence ultimately going with the forms which underlie English *tempera* and *distemper.*

Contacts with the Dutch, who continued to represent their business interests in Japan throughout the so-called "closed country" period of the Tokugawa, are represented by *kōhi* "coffee" from *koffie; garasu* "glass" from *glas; buriki* "tin-plate" from *blik; gomu* "rubber" from *gom;* and *arukōru* "alcohol" from *alkohol.* Japanese *koppu* "(drinking) glass, tumbler, goblet" is often given in lexical tools as being of Dutch origin, but it was first borrowed into Japanese from Portuguese *copo;* however, Dutch *kop* may well have tended to "reinforce" the continued use of the loan form. Perhaps the most prominent of the Dutch loans today is *biiru* "beer" from *bier.* English has also given *biya,* but in modern Japanese this is a bound-form appearing only in such compounds as *biyahōru* "*beer-hall (sic)," and it has not displaced *biiru* in other contexts. The Japanese school-child often carries his books, papers and lunch in a *randoseru,* a leather or cloth knapsack, from Dutch *ransel.* Also vigorously surviving is *mesu* "scalpel" from *mes* "knife," especially in the frequently-heard expression *mesu o ire-ru* "to insert a scalpel, i.e., investigate (something) carefully." Vos' recent comprehensive study of the Dutch loan element in the Japanese vocabulary registers a total of 322 "genuine" Dutch words which were at one time or are now common in the language; 20 Portuguese and Spanish earlier borrowings which tended to be"reinforced" by later borrowings of somewhat similar-sounding Dutch forms (as in the case of *koppu,* above); and a considerable number of hybrids and loan translations involving Dutch, of which *mekuraji* "anal fistula" is a typical example, originating in a translation of Dutch *blinde fistel,* with Japanese *mekura* "blind" and the Chinese loan morpheme *ji* "hemorrhoid."

A few German words survive from more recent times, souvenirs of the period preceding World War II when much of Japanese medicine, technology, and university life was oriented toward Germany; but the survivors here are neither very numerous nor particularly impressive. *Gaze* "(surgical) gauze" is from *Gaze; sukii* "ski" is from *Ski,* and *ideorogi* "ideology" from *Ideologie.* Pressurized gases are kept in *bonbe,* containers whose modern Japanese pronunciation for once exactly reproduces their German original *Bombe;* and *gerudo* "pocket money" from *Geld* survives in student slang, though it is now rather old-fashioned. A German manufacturer of theatrical make-up named Doran has been memorialized in *dōran* "heavy facial make-up for motion-picture photography," and Japanese *runpen* "a tramp, vagrant" preserves German *Lumpen,* as in and originally because of its association with the Lumpen-Proletariat. That ever-present peril of modern urban life, *noirōze,* is from *Neurose;* and *tēma* "topic, subject" from *Thema* is another frequently encountered loan.

The most common German word in modern Japanese is by all odds *arubaito* "part-time job, especially for students" from *Arbeit;* this has in turn entered into what is perhaps the most surprising of all the modern loanwords, *arubaito saron,* from *Arbeit* plus *salon.* In the years immediately following World War II *arubaito saron* meant a bar or cabaret where the "hostesses" were in theory at least not professionals but students or others using the opportunities provided by such establishments to supplement their incomes. Perhaps even initially the term was in most cases merely a euphemism, and as such part of a long history of words coined partly to conceal but never totally to disguise the basic purpose of all such establishments in Japan. Certainly today the term, as descriptive of the personnel resources of such establishments, is only of linguistic interest.

Scandinavia, at least until the coming of the polar jets, has been a long way from Japan, and its languages appear to be unrepresented. With the advent of the quick air route to northern Europe a few years ago a leading Tokyo hotel imported several Swedish chefs who trained the local staff in preparing smörgåsbord, which however, was locally advertised as *baikingu,* from English *viking,* the name (or at least the English name) of the catering firm by which the chefs had been sent. They soon returned to their homeland leaving behind *baikingu* which now means "smörgåsbord," and which seems totally undisturbed in its linguistic existence by its almost complete if purely fortuitous homophony with *baikin* "bacillus." And to round out the story, it must be noted that *baikingu* today, in Tokyo at least, almost always refers not to European but to Chinese food served buffet style.

French has been laid under contribution for *manto* "cape, cloak (worn with Japanese dress)" from *manteau; dekadan* "decadent" from *décadent; atorie* "workshop" from *atelier;* and *zubon* "trousers" from *jupon.* As in the case of German Doran, here, too, a French firm named Bariquand & Marre has achieved virtual immortality in *barikan* "mechanical hair clipper," their name apparently having been attached to the first such device to reach Japan. Perhaps this also explains the otherwise totally unexplicable *kattā* "a boy's or man's dress shirt, generally white," a term which is more common today in the Kyoto and Osaka area than it is in Tokyo.

The French borrowing of greatest currency in modern Japan is without any doubt *abekku* "a date (between a boy and a girl); going somewhere accompanied by someone of the opposite sex," from *avec* "with"; thus, *ano hito kinō abekku de aruiteta wa yo* "I saw him walking with a girl yesterday," or *kono kōen e wa abekkuzure ga yoku kuru* "this park is a favorite rendezvous for young men and women," with *abekku* + *-zure* < *tsure* "accompany." The word has also in recent years acquired connotations of illicit or at least surreptitious intercourse, so that now the *abekku ryokan* "*avec* inn" plays much the same socio-linguistic role in urban Japanese life that "tourist cabin" did in American life and language about a generation ago. And *bakansu* from *vacance* specialized in Japanese to mean "summer vacation" has become extremely common in the last few years.

Japanese is also indebted to French for at least one other important modern slang term, *pā* "crazy, stupid, mixed-up," from *pas*. Though it has become virtually a synonym of the native *baka* "fool," and although it is of comparatively great frequency, the lexical sources in general refuse to list it; the only *pā* these sober-sided writers admit is a stockbrokers' term, from English *par*.

Also frequently met are the French loans *ankēto* "questionnaire" from *enquête* "inquiry, investigation," and *dessan*, from and in the same sense as *dessin* "sketch, drawing."

Finally, before leaving the Romance languages, it should be noted as an example of semantic change in loanwords that *meriyasu* "knitting, knitted goods" is from Spanish *medias* "stockings." And, while it hardly has any profound connection with the history of the Romance languages, it would be a shame not to record *ronparii* "walleye, strabismus" from English *London* and French *Paris*, descriptive of one naturally so endowed as to be able, in theory at least, to catch a glimpse of both cities simultaneously without noticeably moving his head.

By and large, whenever a loanword from French or German comes into conflict in modern Japan with a loanword from English, the English loan soon pushes it out of the picture. Thus *betto* from German *Bett*, originally a medical term in Japanese since the device was used only when in hospital, has all but given way, both in its specialized sense of "a hospital bed" and in the more general sense of any bed (including a wide variety of portable mattresses and other types of bedding more suitable to the Japanese house) under the impact of *beddo* from English *bed.* In much the same way *konkūru* from French *concours* is now fighting a losing battle with *kontesto* from English *contest.*

The same *élan* displayed by English in displacing borrowings from other European languages is to be seen even in the folk-etymologies which well-meaning but unsophisticated persons on both sides of the ocean often provide for loanwords from non-English sources. A *New Yorker* writer visiting in Japan reports, for example, that "the Japanese call music boxes *orugōru,* a Japanese rendition of the English words, 'old gold,' "—and adds, "I am content to let the reason for this remain one of the many little mysteries that characterize the widespread Westernization of a language about as constitutionally ill-equipped for it as any in the world." Be that as it may, and without attempting either to refute his charges or discourage his commendable instinct to leave well-enough alone, it is necessary to point out that *orugōru* has nothing to do with English "old" or "gold," but is simply and regularly from Dutch *orgel.*

The arcane jargon of the physician and surgeon is one of the last strongholds of German in Japanese, since modern Japanese medicine still has about it a generous helping of the Germanic tradition. But since few Japanese doctors now in active practice have had any of their training either in Germany or in the German language this too is now rapidly passing, so that, for example, in hematological consultation fewer and fewer Japanese doctors will mystify their patients by reference to *burutto,* from *Blut,* and more and more will make their point with the equally scientific-sounding *burrado,* from *blood.*

Any comprehensive account of the Chinese loanword element in the modern Japanese vocabulary would immediately exceed the limits of these pages; they appear, as we have already seen, in the earliest period and continue through centuries of painstaking study of Chinese language and culture in Japan, down to modern times when Chinese has provided the main source of morphemes for the neologisms made necessary by Japan's modernization.

The historical relation of the Chinese loanword element to the Japanese vocabulary can be summed up in what might be termed the principle of "total availability." This is to say that potentially any morpheme or any word existing in Chinese of any variety at any period in the history of the language has in theory always been available as a potential loanword in Japanese. Of course, this has been particularly true of written Japanese, but to some extent too the same principle has applied to the spoken language. The writer's motto in Japan has always been, "Let the reader beware," and this remains unchanged even today, though in modern times, to be sure, somewhat more concern is being paid to elementary considerations of intelligibility in most writing. But since Chinese loanwords, when identified as such, have always been written in Japanese texts in the same Chinese characters with which their originals would be written in a Chinese text, potentially any item in any Chinese written source, text or lexical compilation alike, has been available for use in Japanese. If this has consistently enriched the Japanese vocabulary, it has also constantly kept the specter of unintelligibility hovering just over the horizon.

Statistics which have been gathered on the easily identifiable Chinese loanwords in some early texts are both interesting and significant. The *Taketori monogatari* (early Heian period) has 90 Chinese words; a representative section of the *Makura no sōshi* (mid-Heian) approximately equal in length to the *Taketori monogatari* has 720 Chinese loanwords; and a similarly representative sampling of the *Konjaku monogatari* (late Heian) has 1,498 Chinese words.

All this is to speak only of the borrowing of individual lexical items; but in the area of grammar and syntactic structure the loans are also important. Imitations of Chinese word order introduced significant changes into the word order of Japanese, some of which eventually found their way into the spoken language. To give a single example, in Chinese, expressions of the type "he said, it is said, he thought" and the like begin larger syntactic structures; in Japanese, they conclude them. To imitate the Chinese word order in such constructions Japanese verb forms in *-ku* were artificially moved into the place in the utterance that they would have occupied in Chinese; thus *shi notamawaku* "Confucius said," *iwaku* "(anyone) said," etc., introducing rather than following the statement of what was said.

Chinese literary expressions sometimes also gave rise, through "spelling pronunciations" and other over-literate elaborations, to Japanese forms that were neither Japanese nor Chinese. The Chinese graph *tsuo* "sit" was used to write (as a *kun*) the Japanese verb *owas-u* and its expansion *owashimas-u* "be, exist." This writing was often further decorated by writing not only the Chinese graph *tsuo* alone but by writing Chinese *yü* followed by *tsuo*, since Chinese *yü* was often associated (also as a *kun*) with the Japanese deferential prefix *o-*, which was by this writing then identified as the initial element in *o-was-u* and *o-washimas-u,* an etymologically questionable analysis but nevertheless a popular one. The resulting Chinese combination *yü tsuo* was meaningless as Chinese, and could stand at all only as a *kun*-writing for Japanese *owas-u* or *owashimas-u.* But then this combination of graphs began to be read in the *go'on* pronunciation, as *goza-*; this element was next inflected as a Japanese verb; and the eventual result was the now ubiquitous deferential verb *gozar-u* "be, exist." Or, in a similar example of somewhat less far-reaching consequences, Japanese *mono sawagashi-i* "disturbed" was written with Chinese *wu sao,* which then was read as *busso.* This form then came to be used as a word and has survived in the modern language in the same sense as the earlier Japanese compound, though in etymological origin it is neither Japanese nor Chinese. The best that can be said of such items is that they are "Japanese words coined in Japan from Chinese morphemes."

The loan process from Chinese into Japanese has also operated in purely semantic areas. If Japanese *kusa,* originally "grass, herb, pasturage" also comes to mean "draft of a manuscript; literary sketches," as, for example, in the title of the *Tsurezuregusa,* this is because *kusa* is the *kun*-morpheme for Chinese *ts'ao* "grass, straw, herb," and because the same Chinese character which is used for this *ts'ao* is also used for a homophonous Chinese morpheme *ts'ao* meaning "draft, written sketch." (Even if this second *ts'ao* is etymologically connected with the first *ts'ao* in Chinese, perhaps through still a third *ts'ao* "quick, hasty, running [hand]," the point is still the same as far as Japanese is concerned.) In this way not only have the total dimensions of the Japanese vocabulary been expanded by centuries of Chinese loanwords, but the semantic ranges of original Japanese items in the vocabulary have also been significantly extended in many cases, thanks to these same contacts with Chinese.

Both (and perhaps all known) varieties of loans merge in items such as late Middle Japanese *saga,* a Chinese loanword which appears to be a convergence of three quite distinct Chinese originals, *hsing* "nature, disposition," *hsiang* "aspect, outward appearance," and *hsiang* "(lucky) omen"; *saga* appears in Japanese texts in all these meanings.

Most completely acclimatized are, presumably, those Chinese loanwords that have ended up being inflected according to Japanese morphology. The Heian texts commonly treat *sōzoku* "formal dress" in this way, with such forms as the gerund *sōzokite* appearing; and in the modern language we have *zannengaru* "to be disappointed about something," an inflected form built upon the Chinese loanword *zannen* "disappointment." French *sabot* has also achieved this distinction, in *sabor-u* "commit sabotage," as has English *double*, in *dabur-u* "overlap, repeat (something)." Also inflected as a Japanese verb is the Old Chinese loanword, from the ultimate source of modern Chinese *hsiang* "perfume," Japanese *kag-u* "to smell (something)."

One of the more remarkable Chinese loanwords in Japanese is *kikagaku* "geometry," written with Chinese characters which seem to be perfectly understandable semantically, since they mean, in order, *ki* "how many," *ka* "what, how," and *gaku* "learning." But the fact of the matter is that the Chinese original here is partly a transcription, and partly a translation, of the English original, with Chinese *chi-ho* representing English *geo-* phonetically, and Chinese *-hsüeh* for "learning" used semantically; so that the characters, which have followed the word into Japan, are nothing more than a Chinese folk-etymology for the original term. But it is these written characters which, in their Japanese pronunciation, have provided the "etymological" basis for the resulting form.

Most of the Sanskrit loanwords in modern Japanese have entered through the intermediary of Chinese forms, since Buddhist texts have with a few notable exceptions always been read in Japan in Chinese translation. Still, we have already noticed certain forms which show that not all Sanskrit words reached Japan through this roundabout course, and others may be cited in this connection. Even apart from the literary evidence for the presence of Indian visitors in Nara and early Heian Japan, there is the striking testimony of, for example, the *baramon*, i.e. Brahman Gigaku masks in the Shōsō-in collection. Their vivid depiction of the Indian physiognomy shows that contacts with the sub-continent were by no means limited to second-hand literary sources.

Japanese *ama* "a nun" clearly did not come *via* a Chinese version, since the Chinese terms for Buddhist nuns were always based on Sanskrit *bhikṣunī*, while *ama* reflects such forms as Pali *ammā* "mother." The word *kawara* "ceramic roof tile" was an important one for early Japanese Buddhism, since the tiled roofs of the temples were among the most striking cultural contributions of the new religion at a time when the traditional Japanese roof was still thatched straw or wooden shingles bundled together; the word is from Sanskrit *kapāla* "cup, jar, dish; fragment of brick (on which an oblation is placed), skull," and does not appear to have reached Japanese through a Chinese intermediary form. The same is true of *sara* "plate," apparently directly from Sanskrit *śarāva* "shallow cup, dish, plate." Perhaps also without a Chinese intermediary is *mara*, an extremely vulgar modern term for "penis," which has its origin in Buddhist Hybrid Sanskrit *māra* "the evil one, the adversary and tempter," as used in the priestly jargon of the originally celibate Buddhist cloister.

Most of the other Sanskrit loanwords current in modern Japanese appear to have entered the language through Chinese, but some of these too are worth citing, in many cases because of the considerable degree of semantic change which they have undergone. Sanskrit *kāṣāya* "the (yellow) robe of the Buddhist clergy" survives in *ōgesa* "exaggerated, grandiose," a copular noun from Japanese *ō-* "great" plus *-kesa*. In Japan today *danna* is sometimes "husband, master of the house" in the speech of old-fashioned persons, but more usually it survives only as a semi-ironic term of address used by pimps or beggars for accosting strangers on the street; at earlier stages in the history of the language it was "master," especially of a household or a shop. It is ultimately from Sanskrit *dānapati* "a munificent man, a patron of religion," which senses it also has had in Japanese. Sanskrit *kṣaṇa* "instantaneous point of time, instant, moment" survives in *setsuna*, through Chinese, with little semantic change. Japanese *shaba* "this present world" is, through Chinese, from Sanskrit *sahā* "the world-system in which we live"; the original word is attested in texts only from Buddhist Hybrid Sanskrit. The form *hachi* "bowl" is ultimately from Sanskrit *pātra* "any vessel or receptacle," also through Chinese. Today *Chūgoku* is the officially approved word for "China" and the term usually heard, but down to the end of World War II the common word for the country was *Shina*, not as was often supposed from English but ultimately, again through Chinese, from Sanskrit *Cīna*.

During the ages of Buddhist faith the principle of "total availability" was to some extent also honored with respect to Sanskrit, at least in as far as it was available to Japan through the Chinese translations of the Buddhist canon. Today virtually all of this is in every sense of the word a dead letter. For example, *basara* "extravagant, exaggerated (of conduct and persons)" is common in Middle Japanese texts and reflects Sanskrit *vajra* "hard or mighty one; the adamantine weapon," but it no longer survives.

It is in connection with English, and particularly since the end of World War II, that the principle of "total availability" has been exercised to its ultimate. Today virtually any English word in the book is fair game in writing or in public speaking, sometimes with a word of explanation in Japanese thrown in, sometimes without it. Of all the forms thus becoming grist for the "principle" mill, a surprisingly large number survive to be used in the same way again. Accurate statistics on loans from English are lacking, partly because of the spiraling proportions of the materials to be sifted and items to be counted, partly because of the difficulty in distinguishing between genuine loanwords which have actually won a place in the language and transient "nonce words" that do little more than confuse the reader or listener but nevertheless testify to the continued validity of the "principle." As long ago as 1928, however, the Nestor of Japanese English scholars, Professor Ichikawa Sanki, reported that he had found 1,400 English words "in a few months' reading of Japanese newspapers and magazines," and only two years later another Japanese researcher claimed to be able to list 5,000 words of what he called "Japanized English." And all this was long before Japan's decade of foreign occupation by English-speaking troops, and her subsequent close association with all varieties of English-speaking Western civilization!

Amid all these possibilities it is hopeless to attempt to do more than quote a few forms which show particularly interesting changes, extensions, or limitations in meaning or form between the English originals and their Japanese versions, or which are remarkable in some other way.

The term *onnaboi*, from Japanese *onna* "woman" plus *boi* from English "boy," was fashionable around the time of the first World War; it meant "waitress," since *boi* meant "waiter," but regrettably it has departed from the scene in this later, more sophisticated period. Also now gone is Meiji-period *kame* "a foreign dog," presumably from "come here [kʌmˈmɪə̯]!" Gone too are those favorites of the Japanese version of the Roaring Twenties, *moga* "*mo*dern *gir*l" and *mobo* "*mo*dern *bo*y," the first in the sense of "flapper," the second her male equivalent. Other important abbreviations as loanwords include *sufu*, a textile industry term for "staple fiber" built on the "s" of "staple" and the "f" of "fiber," each with Japanese -*u* added. This pre-war example gives Japan some claim to being among the first countries to fall victim to the verbalization of initial abbreviations. Modern abbreviations popular in foreign languages, particularly in English, are now eagerly taken over into Japanese; thus, *haifuai* "hi fi," *pii āru* "P[ublic] R[elations]," and *eru pii* "L[ong] P[laying]." *D.P.E.* for "developing, printing, [and] enlarging [photographs]" is a graphic loan abbreviation common on shop-windows and signs in Japanese cities, but it is not particularly current as a word. The form *ōtobai* "motorcycle" is clearly based on a truncated "*autobike," though this original seems not to be attested in English. Shortened forms of this variety, though generally with better documented originals, are an important feature of the English loanword element in the modern Japanese vocabulary. Examples include *suto* for "strike (labor)," *zenesuto* "general strike," *interi* "intelligentsia," *infure* "inflation," *puro* "professional (athlete)," and the currently ubiquitous *torankii* "tranquilizer (drug)."

Perhaps the most surprising of all these truncated English loanwords is *toire* "toilet," in the speech of women generally with the deferential prefix as *o-toire*. Its currency is another testimony to the growing contamination of older Japanese behavior patterns with foreign models. Traditionally Japanese society has had a fairly large number of words for "toilet" and "latrine," even though the society has, comparatively speaking, not been particularly concerned with developing vocabulary items to conceal the nature of the place indicated. The ordinary neutral term is *benjo*, a Chinese loanword, literally "stool place," and even the most elegant of the traditional terms, *go-fujō*, is simply "the unclean [place]," with the Chinese loanword allomorph of the deferential prefix. The native Japanese term, now rarely heard, was *kawaya* < *kaFaya*, historically of disputed etymology but probably either "side house" or "river house." In recent years there has been a considerable vogue for the imitation of Western attitudes concerning toilets, linguistically marked by such words as *o-toire*, and by loan translations of euphemisms such as *o-tearai* "lavatory" and *keshōshitsu* "powder-room." And finally we must also record the form *kuriin toire*, apparently from "*clean toilet," a trade-name for a variety of chemical toilet now beginning to be fairly popular in urban centers.

Truncated loanwords whose heads rather than their tails have been lopped off are also fairly common; *nisu* is from English "varnish" and is used in the same sense, and *hōmu* is now specialized in the sense of "railway station platform," from the last syllable of which it ultimately derives, *purattohōmu* > *hōmu*. For "beefsteak" Japanese *teki* shows a strangely rude abbreviation and internal simplification from an original **bifusuteiki;* one modern dictionary, in fact, defines *teki* in this sense for its readers as "an abbreviation of *bifuteki*"! Japan's once important film industry is now, thanks to the inroads of television, largely devoted to grinding out "blue" movies known as *erodakushon,* a doubly truncated and collapsed form from "erotic production."

Examples of semantic specialization in current English loanwords are *mishin* from "machine," strictly specialized in the sense of "sewing machine"; *haikara* from "high collar," generally used as a copular noun with *-na,* meaning "fancy, high-class"; *ōba,* also a copular noun, from "over," meaning "exaggerated, high-flown" (distinguish *ōba,* a truncated loan-version of "overcoat"); *sarariiman* from "*salaryman," meaning "white-collar worker"; and *daiya* from "diagram," specialized in meaning as "railroad time-table." The word for a wall-mounted electric plug receptacle is *konsento,* probably from English but of a dubious past; the most acceptable theory is that which derives it from *concentric,* though some modern Japanese dictionaries derive it, without comment or apology, from English *consent* "agree with"! To the *konsento* may be connected a *sutando,* from "stand" but specialized in the sense of "table lamp" or "reading lamp." *Sain* is etymologically from "sign," but it is semantically strictly limited to "signature"; since the use of hand-written signatures is not a Japanese custom (official and legal purposes are served rather by the vermilion-inked impression of a carved seal), *sain* as a result almost always means the signature of a movie-star or other celebrity for which his fans clamor.

Many English loanwords require a fairly detailed acquaintance with the intricacies of modern Japanese urban life before they can be understood at all, quite apart from their English etymological origins. Thus, what is one to make of a bus which carries signs proclaiming that it is a *wanmankā?* Obviously this has its ultimate and etymological origins in English "one-man car," but what does that mean? One must first know that traditionally a Japanese bus has carried not only a driver but one or more young girls who stand in the aisles and sell tickets, announce stops, and in general console the passengers for the inadequacies and discomforts of this transient world. But in recent years the growing labor scarcity in Japan, plus the fact that these girls have also traditionally been paid next to nothing, has made it impossible to provide their chattering services on many buses, which have become as a result "one-man cars," or buses on which the driver not only drives but does everything else as well; let the rider beware.

Or let us take the case of *sutandobā*, from English "stand bar." In Japan *bā* "bar" has traditionally almost always meant a cabaret-type establishment where drinks are served, generally at tables and by waitresses, and has not been particularly associated with the counter-like piece of furniture behind or on which the drinks are prepared. When in fairly recent times a much simpler kind of drinking establishment began to gain favor, one in which customers could sit or even stand up and drink at the "bar" itself, *à la* Far West, and one in which their social contacts were generally limited to conversation with the male bartender, these were designated *sutandobā*, with "stand" from the English verb. Such are the socio-linguistic and semantic labyrinths in which loanwords for what are after all fairly simple things have involved modern Japan.

Other pitfalls lie in wait for the unwary non-native speaker of Japanese armed only with a knowledge of the originals of many such loanwords. How is he to guess that *garasu* from Dutch *glas* is restricted to the item from which windows are made, but that speakers who wish to show their knowledge of English and at the same time avoid *koppu* from Dutch *kop* will use *gurasu* for "(drinking) glass"? Let him also beware the difference between *sutoraiki* "(labor) strike" and *sutoraiku* "(baseball) strike," though here the situation is somewhat saved by the fact that only the first of this pair is ever truncated to *suto*. English "check," admittedly a many-faceted word, has spawned at least three Japanese versions which are generally distinguished quite carefully from each other: i) *chekku* "(bank) check; also, mark off"; ii) *chekki* "(cloak-room) check," and iii) *chikki* "(through) check (for baggage on a train)." This assignment of semantic areas to the different Japanese forms seems to represent a consensus of Japanese lexicography, though as might be expected on so delicate a question some authorities naturally differ, preferring, for example, to ignore the existence of *chekki* and to lump its meaning together with those of *chekku;* but even so all the sources admit the co-existence of *chekku* and *chikki*. This last has probably been influenced in the course of its development by contamination with *chiketto* from "ticket," and both must at all costs be distinguished from *chikku,* ultimately from the surviving last syllable of a truncated "cosmetic," but specialized in Japanese to mean a tube of congealed and perfumed oil used by Japanese men to fasten unruly hair in place, or in the previous generation, on mustaches.

Vos has similarly catalogued an amazing range of seven different origins for Japanese *puro,* a truncated loanword which may, depending on the context, derive from any one of the following: *puroretariya,* from German *Proletarier; puroguramu,* from English *program; puropaganda,* from English *propaganda; purosuteichūto,* from English *prostitute; purofueshonaru,* from English *professional; purodakushon,* from English *production,* specialized in the sense of "motion picture production"; and *purosento,* from Portuguese *procento* or German *Prozent,* "percent."

The term for a man's odd or blazer jacket or for the top half of a western suit of clothes is *sebiro,* now generally written with Chinese characters which seem to indicate for it a fairly plausible etymology from Japanese *se* "back (of the body)" plus a voiced combining form from *hiro-i* "wide, broad." As a matter of fact *sebiro* is a loanword from English "civil." In the early Meiji period the wearing of western clothing while on duty in government offices and state-sponsored schools was made mandatory; such dress was the "uniform" of the civil servant and public official in the same way that the military uniform was for the army and navy officer.

Men's clothing, in general, tends to cause semantic difficulties; *waishatsu* is etymologically "white shirt," but in Japanese it is simply any outer shirt, i.e. any non-undershirt, so that *shiro-i waishatsu* "white shirt" is not redundant. Other traps for the unwary are *pantsu* "(men's) underdrawers" and *bando* "belt (for trousers)," and while *zurōsu* from "drawers" for "(women's) underdrawers" is semantically unexceptional, its great phonetic divergence from the English original certainly lifts it above the level of the routine.

Women's western-style clothing is particularly rich in terms from English, notably *wanpiisu* "one-piece (dress)," and if there is a *wanpiisu,* there is also quite naturally a *tsūpiisu,* "two-piece (suit, i.e. a skirt and a matching jacket)." Obviously *sutairu* is from English "style," but it almost always means "figure" or "shape," not "style," which is generally *fuashion.* The somewhat less common *mōdo* from French *mode* is generally restricted to the expression *toppu mōdo,* presumably based on English "top" plus *mode.*

Not content with *meshi* and *gohan* for "cooked rice" and with (among other terms) *kome, ine* and *beikoku* for various states and conditions of uncooked rice, the Japanese now also commonly call it *raisu* on those occasions when it is eaten from a western-style plate with a fork, or more often, a soup-spoon. English [æ] as in "man," "can," and "ran," is often rendered in Japanese loanwords with *-y-* + *-a-*, as in *kyandei* "candy," except where the insertion of the *-y-* would further disturb the phonetics, such as for example following Japanese *s-*. Following this pattern, English "hash," in the sense of cooked meat and vegetables chopped small and browned, would regularly give **hyashi* or **hyashu;* neither of these forms is met today, but instead the first of them has generated a "naturalized Japanese" form *hayashi* as in *hayashi raisu* "hash [and, or generally, on] rice." This *hayashi* expanded from **hyashi* is homophonous with a common Japanese surname, and the combination *hayashi raisu* is generally folk-etymologized as "rice *à la* [Mr.] Hayashi." The dish as it is generally served in Japanese eating establishments is such as to give no extra-linguistic hint of its foreign etymological origins, and the visiting European or American who has sampled it can only be grateful that a vivid national imagination has chosen to assign the blame for its concoction to a mythological local chef named Hayashi. Similarly prolix is *miruku* for canned or condensed milk, contrasted with *gyūnyū* for fresh cow's milk. The Japanese have been familiar with the printed page since at least the fifth century, but *peiji* was introduced for the page in a western-style book, so unlike the double-folded page in a traditional Chinese-style book.

Almost all the examples of loanwords cited in this section make it clear that when words from any other language enter Japanese they are made to conform more or less to the phonological structure of Japanese—nor is this particularly to be wondered at. We have seen this phenomenon operating in one way or another ever since the earliest Chinese loanwords, and an English word like *fuse* is no more distorted in its Japanese version *hyūzu* than are Chinese *feng* as *fū* or *shih* as *shi*. The only reason the English examples may strike us as more remarkable is that we know the originals better, and hence are in a more fortunate position for evaluating them after they have suffered their sea-change.

By and large, the "rules" by which these changes take place are simple and fairly regular; sounds or combinations of sounds not appearing in Japanese or without close equivalents in Japanese are replaced by the nearest thing available (*r* for *l*, *b* for *v*, *fu* for *hu*, *s* and *z* for voiceless and voiced *th*, etc.), and sequences of consonants not found in Japanese (and few are) must be spaced out with extra vowels; beyond these general statements there are only items of detail and often, too, sporadic chance. In English *news* the final *-s* is [z] for most of us, but the word is always *nyūsu* in Japanese; on the other hand *close up*, as in photography, has given *kurōzu appu*, which would strike most English speakers as being rather from *close up* "shut, terminate," with which it appears to have no connection at all.

Most surprising of all the many changes in pronunciation which affect loanwords in Japanese are those instances where combinations of sounds unknown in native Japanese words, or even in Chinese loanwords, are introduced for use in foreign loanwords, but in which they do not then very greatly resemble the sounds of the foreign originals either. Thus, English *bed*, *mob*, and *hog* have given *beddo*, *mobbu*, and *hoggu;* but the English forms do not have geminate consonants, and geminate *b*, *d*, *g* are equally unknown to Japanese words and Chinese loanwords in Japanese; why then are they introduced here? One possible "explanation" might be that the English vowel here is heard by the Japanese as especially short, and that it is for them best represented by the short vowel preceding a Japanese geminate consonant; but this does not explain why the difference in vowel length here has taken such striking priority over the acoustically more prominent consonantal gemination. By and large, any such "explanation" is generally little more than an *ex post facto* rationalization, and little can be said beyond the fact that modern Japanese often chooses to violate its own patterns of phonological occurrence in order to come up with new sequences that are not part of the foreign words being imitated.

In other equally surprising instances, Japanese does not make use of sequences which it does have for reproducing closely equivalent sequences in foreign words, but chooses rather to reproduce them with widely divergent versions. Thus, although the sequence of the Japanese syllabic nasal followed by *b* is pronounced [mb], in reproducing English *Columbia* Japanese regularly insists on *koromubia*, introducing a needless *-u-*, rather than the expected **koronbia*, which would reproduce the pronunciation of the original much more closely.

One turns with relief from these massive encounters with English to some of the etymological oddities of the non-native Japanese vocabulary—items which seem to have undeniable connections with far-distant language families but whose route in reaching Japanese remains obscure. The Japanese *daikon* is a large, extremely tasty white radish much favored on the Japanese table; the word is written with Chinese characters *ta-ken,* "large root," which make it appear to be a Chinese loanword, but the lexical sources make it clear that no such word ever existed in Chinese and that this writing is no more than a folk-etymology; *daikon* itself is to be associated with Greek *δαῦκον,* a term for the wild carrot, among other similar plants, as for example in Theophrastus' *Historia Plantarum* (fourth to third centuries B.C.). Plant names are often great travelers; but how *δαῦκον* reached Japan remains totally obscure. The great French orientalist Sylvain Lévi long ago pointed out that *ikari* "anchor" must be associated with Indo-European words for the same device, notably Greek *ἄγκῡρα,* Latin *ancora,* and their derivatives, but how this came about is not clear. The Japanese have been familiar for centuries with mummified figures of men and animals, thanks partly to certain Buddhist sects who have traditionally practiced mummification of their departed clergy; the word for "mummy" is *miira,* which goes with Arabic *murr,* Persian *mor,* and Latin *myrrha,* but which most probably did not reach Japanese through a Chinese intermediary. The Old Japanese term *marö,* used for first-person reference and also later as a suffix in male given names, may possibly go with an Indo-Iranian original; and even *sake* "rice wine" has been suspected, with some reason, of having non-Japanese origins, though the details remain unclear. The old-fashioned pipe in which one pinch of tobacco was smoked at a time, the *kiseru,* is attributed to Khmer *khsier;* and *sarasa* "a kind of fabric with dyed designs" goes with Javanese *sarasa,* along with (or through?) Portuguese *sarasa.* Each of these words still needs a complete study to make clear as far as possible the routes by which they reached Japan and Japanese.

In the meantime, what has been happening in the other direction? What Japanese words have been taken over into other languages outside of the Japanese-speaking regions of the world, and to what extent? As we might suspect, the pickings here are fairly meager. Two great "booms" of interest in "things Japanese," one in western Europe around the turn of the present century and one in America over the past decade, have brought into the active English vocabulary a few words for distinctive Japanese cultural items, but apart from these there is relatively little to report. The basic studies on Japanese words in English are still those published by E. V. Gatenby in Tokyo in 1931 and 1934, which today need to be modified only in detail. Meanwhile, Gatenby's most original contribution appears to have been totally overlooked by English lexicographers, which probably only proves that an obscure series of research papers published in foreign parts is not the best place in which to present valuable and original findings of scholarship. This was his suggestion that the mysterious English *funny* which appears, especially from about 1800 on, in the sense of "a narrow, clinker-built pleasure boat; any pleasure boat" (a citation from 1843 has, "I was in a 'funny,' as the small boats at Cambridge are called"), is to be referred to Japanese *fune* "boat." But this explanation appears completely to have escaped the attention of the dictionary etymology makers. Gatenby also made an attempt to trace a considerable number of English loan translations of Japanese originals—"god shelf" for *kamidana,* etc.—which have not been mentioned here.

The word *bonze* for a Buddhist priest, monk, or cleric in general seems to be the oldest Japanese word still surviving in any European language; it can be cited from a letter of Francis Xavier as early as 1552 (*Bonzii*), and is seen in English from 1588 on as *Bonsos;* a 1618 citation has, interestingly enough, *boze,* without the pre-nasalization *-n-*. The word *sake* is attested as early as 1687, as *Saque,* followed by *Sakki* in 1797 and *Saki,* or *Sake* in 1878, and from 1901 on *sake;* the elegant spelling *saké* is as old as 1884. If English *soy,* with the variants *soja* and *soya,* is indeed from Japanese *shōyu* "soy sauce" (and there is much that is phonetically questionable about this equation) it is an old loan, with *souy* in 1696, *soy* in 1699, and *sooju* or *soy* in 1779. *Mikado* goes back to 1727 translation of an early Dutch account of Japan, where it appeared as *Mikaddo;* in the usual spelling it dates from 1875. (Gilbert and Sullivan's *The Mikado,* probably the most lasting tribute of all to this period and its fondness for "all one sees that's Japanese" was introduced to the London public in 1885.) The botanical term *ginkgo* is something of a puzzle; the classification *Ginkgo biloba* for the attractive gymnospermous tree of eastern China and Japan with its characteristic fan-shaped leaves was set by Linnaeus in 1711; but the word itself with its curious *-kg-* sequence apparently originates in the papers of the first European naturalist in

Japan, Engelbert Kaempfer (1651–1716). A. C. Moule has argued convincingly that the form *ginkgo* originated in a double mistake—first, a mistaken "spelling pronunciation" of the Chinese characters generally used to write *ichō*, the usual Japanese name for the tree in question, second, a typographical error which replaced the *-y-* in Kaempfer's already mistaken **ginkyo* (for **ginkyō*) with a *-g-*.

The increasingly great interest of Europeans in "things Japanese" begins to be evidenced in *hara-kiri* which is as old as 1856, but it is a word with which English spellers have always exercised a good deal of liberty: *hari-kari* and *hurry-curry* are among the most popular variants noted. Japanese *taikun* "great prince" is a Chinese loanword and during the Tokugawa period was a common appellation for the *shōgun;* Sir Rutherford Alcock's *The Capital of the Tycoon: A narrative of three years residence in Japan* (1863) helped to bring it to the English language. The word had been brought to America somewhat earlier by the Perry expedition of 1852–54, and "it was used as an affectionate nickname for Abraham Lincoln by the members of his secretariat." *Samurai* dates from 1874 in England, and *musumee* from Japanese *musume* "young girl" from 1880. From 1901 on some of the English forms of this last, notably *mousmee,* show the spelling influence of French, which has *mousmé* and *mousmée* from 1887. The *kimono,* from 1887 on, and as a verb, *kimonoed,* from 1894, was destined in the West to become an article of undress rather than, as in Japan, an article of dress; and quite appropriately *geisha* followed it in close pursuit, in 1891 in England but in the same year, 1887, in America.

The popularity of Japanese-style interior decoration during the 1950's in America brought with it a rash of Japanese terms applicable to the art; *shibui* "tastefully restrained (in color, etc.)" is the most notable of these, although both the 1950 second edition of *Webster's New International Dictionary* and the 1961 *Webster's Third New International Dictionary* fail to list it; incidentally both have *ukiyoe, netsuke,* and *shoji,* while the Third alone has *tatami* and *origami.*

The pidgin of Hawaii as spoken there by persons of Japanese ancestry naturally is rich in words of Japanese origin, but they remain to be reported upon scientifically. H. L. Mencken has suggested that if a proposed etymology of American English *hobo* from Japanese *hōbō* "everywhere, every direction" is correct, it would be "the one and only word that the Japanese immigrants have given to the American language," but the equation seems unlikely in the extreme; besides, the word for *hobo* in Japanese is, as we have seen, from German *Lumpen!* Mencken also reported in 1952, in some detail, on a word which he spells *skibby,* "used to designate Japanese on the Pacific Coast; it is extremely offensive to them, for it was applied originally to a loose woman, though it now means, at least in California, any Japanese, male or female. It seems to have been borrowed from a Japanese word, though what word is uncertain." The original here is not too difficult to locate; it is *sukebei* "lechery; bawdiness; lewdness, prurience; a bawdy person; a hot stuff; a wolf," to quote in its delightful fullness the entire entry *s.v.* from Kenkyusha's *New Japanese English Dictionary* (1954). And although English lexicographers appear to prefer for *skivvy, skivvies* "underwear (U.S. and British naval slang)" a somewhat more respectable if semantically quite obscure origin in Gaelic *skaivie,* from Old Norse *skeifr* "oblique, crooked," here too there is surely much to be said for the same Japanese etymon.

Japanese scientific discoveries have contributed a few words of Japanese etymology to the international scientific vocabulary; *urushiol* and *urushic* acid, both the "principal blistering substance in Oriental lacquer trees, poison ivy, oak and sumac," pay tribute to Japanese work in the study of the toxic agent in the *urushi* or lacquer tree; and Japanese proper and place names, which have otherwise been ignored here, have also played their part in this connection. Among the examples which immediately come to mind is the *shigella* dysentery organism, named for its discoverer Dr. Shiga Kiyoshi (1870–1957), and Professor Yagi Hidetsugu's (1870–) *yagi*-type antenna. The practice of localized cautery therapy known in English as *moxa* is not particularly a Japanese invention, since it goes back to traditional Chinese medical techniques imported from the continent over many centuries, but the loanword is from Japanese **mokusa,* with a voiceless *-u-*. Today the standard language has only a parallel form *mogusa,* with voiced *-g-*, but the loanword in English preserves a different (and presumably earlier) form with the original *-kusa* element. Both are from *moe-ru* "burn" + *kusa* "grass, herb," and refer specifically to the young leaves of a Chinese wormwood used in the cautery technique. As *Moxa* the term appears in English as early as 1677.

Chinese, as we have seen, has given Japanese much. What, if anything, has the Japanese language given back in return? There seems to be no case which can be cited of a Japanese word taken into Chinese bodily as a loanword, but in spite of this fact an important segment of the modern Chinese vocabulary is heavily in debt to Japanese. This consists of Chinese words whose etymological origin is to be found in neologisms coined in Japan from Chinese loan morphemes, and then taken over directly into Chinese. It is difficult to know exactly what to call the resulting Chinese forms—they are not actually loanwords, since they are not partial or full imitations of foreign forms; they are not loan translations, since they do not really translate their originals, which in Japanese are themselves based on Chinese elements. Perhaps it is best simply to call them Chinese words based on Sino-Japanese originals.

Historically these words have had several different stimuli, notably the great influx of Chinese students into Japan from about 1896 on, and more recently, the Japanese military occupation and administration of large areas of mainland China prior to and during much of World War II. When Chinese students came to Japan in the last years of the Manchu dynasty they eagerly turned to Japanese translations of European and American books as being somehow more easily accessible to them than the originals would have been. This expectation was largely a mistaken one, based upon the use of Chinese characters in writing modern Japanese and the gratuitous assumption that any document containing Chinese characters should somehow be easily understandable to a Chinese regardless of the language in which it was written. Some of these students undertook "translations" of Japanese books into Chinese knowing little more about Japanese than which way the books opened, and the versions they turned out were, as might be imagined, generally full of errors as a result. Of course, many other Chinese students in Japan at the turn of the century also became very good at Japanese. In either case, the translations and the writing in Chinese of such students inevitably became filled with Japanese-coined neologisms based on Chinese loan morphemes, written in Chinese characters. In China these new words rapidly gained favor as new terms for ideas, concepts, and objects with which the Chinese were coming into contact for the first time in their history.

Here can be cited such terms as *ko-ming* "revolution," Japanese *kakumei; she-hui* "society," *shakai* (the "New China" is heavily in debt for its vocabulary of Marxism-Leninism to such borrowings of Sino-Japanese neologisms!); *che-hsüeh* "philosophy," *tetsugaku; ching-*

chi "economics," *keizai; sheng-ch'an* "production," *seisan; mao-i* "trade," *bōeki;* and *wei-sheng* "sanitation," *eisei*. As the contemporary Chinese linguist Wang Li has said about words of this variety, it is impossible in many cases to distinguish them from Chinese neologisms coined in China since the principles upon which they were made up were the principles of literary Chinese, as well understood in Japan as in China. Once they had become Chinese words, their origins could only be discovered by searching the texts for their first occurrences.

The problem is further complicated by the fact that in almost all cases the Japanese did not coin such neologisms out of thin air, but whenever possible went first to Chinese classical texts and attempted to locate something there that would provide a model for the coinage. The Ch'ing intellectual leader Liang Ch'i-ch'ao (1873–1929) denounced *keizai* "economics," the proximate origin of Chinese *ching-chi*, as a "Japanese-ism," along with *tetsugaku* "philosophy" and *shakaigaku* "sociology," and for each he suggested other "pure Chinese" equivalents with which he wanted to see these "foreign" terms replaced. Of course he wrote in vain, for all three have survived in Chinese as in Japanese. His concern was actually even vainer than it appeared to be, since, for example, both *keizai* "economics" and *keizaigaku* "the science of economics" can be quoted from Chinese texts of the Sung dynasty, where they were even then simply semantic specializations of related expressions going even farther back into Chinese literature. The Japanese, in coining such neologisms, have in general been more Chinese than the Chinese themselves, and the results are certainly more Chinese than they are Japanese.

Other terms, however, especially several important ones dating from the Japanese administration of certain areas of the Chinese mainland, clearly betray their Japanese origins since they include the Chinese equivalents for what were in the original forms not Sino-Japanese loanwords but original Japanese morphemes. These words have "become Chinese" simply by reading the Chinese characters in which they are written (as *kun*-writings) in their modern Chinese pronunciations, producing terms that are not generally valid in terms of the lexical materials and syntax of Classical Chinese, and hence clearly marked as "Made in Japan." These come close to being loan translations, in the usual sense of the term, and include such items as *ch'ü-ti* "control, suppress," from Japanese *torishimari; ch'ü-hsiao* "cancel," *torikeshi; ch'ü-yin* "trade, business," *torihiki; shou-hsü* "(paper-work) procedures, formalities," *tetsuzuki;* and *hsiang-shou* or *hsiang-shou-fang,* "party in a suit," from *aite* and *aitekata.* Modern Chinese lexical sources vary greatly in their sensitivity to these forms as Japanese loans; the *Tz'u hai,* for example. identifies *ch'ü-ti, ch'ü-yin,* and *hsiang-shou-fang* as "Japanese," but not *ch'ü-hsiao* or *shou-hsü.*

Chinese *chü-le-pu* "club" was an important term in the early decades of this century, when it was specialized in the sense of a variety of "popular front" organization, but the word itself came into Chinese through Japanese. Its Chinese form is due to rendering the characters with which Japanese *kurabu* from English "club" was often written, a kind of graphic pun since these characters mean, in order, "together-enjoy-unit." But without the intermediary of Japanese and this Japanese-devised Chinese orthography there would have been no reason for the English initial cluster *cl-* to be represented by Chinese *chü-l-* rather than, for example, Chinese **k'o-l-.*

Perhaps the most involved of all Japanese borrowings into a foreign language is Vietnamese *thần phong,* the designation of an elite detachment of the South Vietnamese Air Force, based upon Japanese *kamikaze* "divine wind," which of course came into world prominence as the name of the "suicide corps" with which the militarists attempted unsuccessfully to postpone Japan's collapse in the last months of World War II. Historically the term has particular reference to a typhoon which saved Japan from a Mongol invasion late in the 13th century by wrecking the enemy invasion forces. But Japanese *kamikaze* is itself a loan translation from Chinese *shen feng* "divine wind." Vietnamese *thần phong* is therefore based on *shen feng* in the military and patriotic senses of *kamikaze,* while phonetically it represents the regular Vietnamese developments of the original Middle Chinese morphemes underlying *shen feng.*

Japan's military defeat in World War II and the subsequent years of occupation by English-speaking foreign troops have most recently led to the development of an incipient pidgin which has been called "Bamboo English." Even in the broadest terms it is probably necessary to distinguish here between two different varieties of this speech. One is jargon of small vocabulary and limited syntactic possibilities but of extremely great practical use, chiefly employed between foreigners in the military establishment and local laborers, servants, or other employees from social levels where bilinguality is neither expected nor necessary. The second is considerably more specialized though no less practical, and has well been called a "vocabulary of venery." It serves for what verbal communication is necessary between non-Japanese-speaking foreigners and the extensive world of their local lady friends of every variety and description.

For the first variety of this post-war pidgin there appears to be no convenient Japanese designation; for the second, however, the Japanese have coined the extremely apt term *pangurishu,* from *pansuke* "street-walker" plus *ingurishu* "English."

American military involvement in the affairs of Korea following World War II and the continued American military occupation of South Korea even following the armistice of July 1953 have both tended to extend the sphere of this *pangurishu* to Korea as well. There it has been just as useful as in Japan, since its predominantly Japanese vocabulary element is well understood by the Koreans, long accustomed to an earlier Japanese occupation. As in all such pidgins, the feature about both these varieties which is at once rather charming and rather pathetic is the fact that the foreign visitors take to them thinking that they are Japanese or, more lately, Korean, while the locals also assiduously imitate them, in the devout belief that they are thus mastering English.

The second variety of pidgin is chiefly distinguished by the abbreviation [mus] for "young girl," from *musume.* Variations for the full form include [ˈmusəˌmeɪ], [ˈmusiˌmeɪ], [ˈmusˌmeɪ], etc., many of these accurately reflecting (as did the earlier *mousmee*) the unvoiced second *-u-* of the original. How to spell the shortened form [mus] has been a problem for several decades in the Far East, for which generally the inelegant but efficient *moose* has been the only solution.

Japanese elements in both these pidgins include the following, cited in the impressionistic English orthography in which they are generally found if and when they are written at all: *skoshi, skosh; haihai; taksan; morskoshi* (a contamination of English *more* with *mō sukoshi* "a little more"); *daijob, daijobee, daijobu; benjo; watash, watashee; mushee-mushee; ichiban; chotto matte; dozo; anone;* and the suffix *-san,* in the pidgin extended to include first-person (*Me Grant-san* "I am Mr. Grant").

A ubiquitous term in the first variety of the pidgin is *hancho* "leader of a small group." This term has been reported in the literature as *honcho* but this spelling is a blunder, based on a false analogy with the place name *Honshū* (from which, as a matter of fact, one student of the pidgin has even tried to derive it etymologically!). The pidgin word is always [ˈhantšo] or [ˈhantšou], and is the only living survival of Japanese *hanchō* "squad leader," a term from the old Imperial Japanese Army which has now, like the army itself, disappeared from Japanese life.

Much of the vocabulary of both varieties of the pidgin consists of pseudo-Japanese pronunciations of English words, which have in some cases even found their way into genuine Japanese. One such is the form which is reported as *presento,* but which actually appears as [prɪˈzento] "a gift, especially and originally of merchandise not available on the Japanese market." Often it is impossible to trace the course of any individual item here with certainty. An English item entering directly into Japanese, then going from there into the pidgin, would look much the same as one going the other way; and even a detour by way of Korean would also leave little overt evidence. Most of those who have written on these pidgins assume, for example, that *biru* or *biiru* "beer" is immediately from Korean which borrowed it from Japanese which borrowed it from English; but the last part of this equation is certainly incorrect, and there is little evidence for the first part either. In the nature of things, neither variety of the pidgin is likely to leave the kind of literary records that would ever make possible precise documentation.

A few citations of continuous utterances and sentence fragments from the pidgin will make clear much of its internal structure, and also the essential role which a few Japanese lexical items play: *Taksan dai-jobee with ol' watashi,* "it's perfectly all right with me"; *water taksan cold,* "the water is very cold"; *meda-meda one time, number one jo-san taksan chichi hava-yes,* "come look at the girl with the great figure"; *skoshi* x-*san,* "little Miss x"; . . . *has skoshi time, can speak only sayonara* (var. *sayonada*)," . . . has but little time, and can only say 'goodbye.'" The pidgin verb constructions *hava-yes* and *hava-no* (*laundry hava-no,* "the laundry isn't done") seem to reflect the final affirmative and negative inflections of Japanese or Korean verbs, or perhaps both.

Somewhat earlier, at the time of the Meiji opening of Japan to the West, contacts between Japanese and English-speaking persons from abroad produced an interesting "ports lingo," particularly in the Yokohama area; its chief record is in the form of a contemporaneous pamphlet in which the "Japanese" text is notable for its spelling which identifies as many fortuitous resemblances between Japanese and English words as possible. The following extract from this pamphlet, a conversation between a shopkeeper and a customer, reproduces both its English text and its "Japanese" orthography intact, with some of the Japanese items identified somewhat more exactly by respelling them in the usual romanization in square brackets:

Good day.	Ohio [ohayō].
I wish to see some nice small curios.	Your a shee cheese eye [yoroshii chiisai] curio high kin [haiken].
Of what kind and quality?	Nanney [nani] arimas?
Something exceptionally nice.	Num wun [< English "number one"] your a shee arimas?
Would you like to see some old Satsuma screens of wonderful variety and strong pattern?	Die job [daijobu] screen high kin arimas?
Yes, I should be pleased to look at them.	Sigh oh [sayō], high kin arimas.
Will you not take 1 Yen for the article? I am an influential man and can put many thousands dollars [sic] worth of business in your way.	Ichi rio sinjoe arimas, watarkshee oki akindo [watakushi ōkii akindo], tacksan cow [takusan kau].
Excuse my plain speaking, I am not like other Japanese dealers, and have always made it a rule to ask only the price I will take for my goods. I have travelled in Christian countries and have learned to despise the double faced dealings of our nation.	Watarkshee atchera kooni [achira kuni] maro maro arimas. Japan otoko bakka, kono house stoats neigh dan backary hanash [hitotsu nedan bakari hanashi].

There are many surprising and linguistically important features in this text, which has been studied in detail by Daniels; one immediately notices, for example, the constant repetition of forms involving the humble form *haiken* "(respectfully) look at."

In the light of this evidence for the development of these two varieties of pidgin some of the early accounts of Americans and Europeans faced with the Japanese language take on added interest. Lt. George

Henry Preble, U.S.N., accompanied Commodore Perry's second expedition to Japan in 1854. Of the Japanese and their language he wrote later, "They have a great aptitude at catching English sounds and ask the American name of everything they see, and so pick up a vocabulary of our language. They generally give us the Japanese name, but it sounds so barbarous to our ears, we are not at much trouble to remember it." It has been suggested that, in honor of this passage, the general tendency for Japanese to attempt to deal with foreigners in any given social situation in Japan through the medium of English rather than Japanese could be termed "Preble's Law." The term is still justified today, but the developments of the varieties of the pidgin show that the "law" must today be somewhat modified. Somewhat earlier, the Russian Captain Vasily Mikhailovich Golovnin (1776–1831), who was a prisoner in Japan between 1811 and 1813, expressed himself after his release with equal clarity on the subject of the language. He wrote that "the Japanese pronunciation is excessively difficult for us Europeans. There are syllables which are not pronounced like *te* or *de*, but something between them, which we are quite unable to produce. In the same manner, there are middle sounds, between *be* and *fe*, *jse* and *sche*, *ge* and *che*, *che* and *se*. No European would succeed in pronouncing the Japanese word for fire. I have studied it too for two years, but in vain; when pronounced by the Japanese, it seemed to sound like *fi*, *chi*, *psi*, *fsi*, pronounced through the teeth: but, however we turned and twisted our mouths about, the Japanese persisted in their 'not right'; and such words are very numerous in the Japanese language."

The reaction of the American troops landing with the occupation forces in late 1945 to the sounds and words of Japanese were, in essence, not very different from those of their predecessors; and to the general and typical reaction which Preble and Golovnin so colorfully expressed is due the development of these incipient pidgins.

Perhaps the best way in which to sum up these scattered notes on some of the non-Japanese elements in the modern Japanese vocabulary is to quote with no further comment two recent documents. While of quite different origin and character, they give impressive testimony to the extent to which loanword elements have permeated the lexicon of modern Japanese.

The first of these is the poem which His Imperial Highness Prince Mikasa wrote for the annual court ceremony which celebrates the beginning of a new year of court poetry. This event is usually if somewhat inaccurately reported in the western press as the “Emperor's New Year's Poetry Contest.” Normally even Chinese loanwords are avoided in poetry of this variety, much more English expressions, but in January, 1965 H.I.H.'s poem, as reported in Tokyo daily newspapers for the evening of January 12, 1965, was as follows:

e o okuru beruto konbea	The belt-conveyer which brings in the feed
kaiten shi	revolves and
sūsen no hinadori	thousands of young birds
muragari tsuibamu	cluster about it to eat.

(The set theme for the 1965 poems was *tori* “birds.”) In such a lofty context to meet *beruto konbea,* hardly a mellifluous lexical item even in its original language and far less so in its Japanese garb, cannot but teach a profound lesson about the degree to which loanwords of every variety, and especially loanwords from English, have permeated modern Japanese life.

The second such document is an article from one of the major Tokyo dailies for October 4, 1964. It notes that according to established international Olympic protocol the signals for track and field events are given in the language of the host country. Hence at the Tokyo games of the XVIII Olympiad Japanese would, for the first time in world history, be used as an international language in this kind of an event.

The Japanese terms for signaling the beginning of track and field events as used on this occasion are as follows:

(1) *ichi ni tsuite!*	“On your mark!”
(2) *yōi!*	“Ready!”
(3) *don!*	“Go!”

Typically and significantly, they contain in (1) the Chinese loanword *ichi* “mark, position,” and in (2) the Chinese loanword *yōi* “take care.” The last item, *don,* is onomatopoeia. The only etymologically Japanese elements here are the grammatical particle *ni,* and the verb form *tsuite.*

Chapter 7

"Special and Notable" Utterances

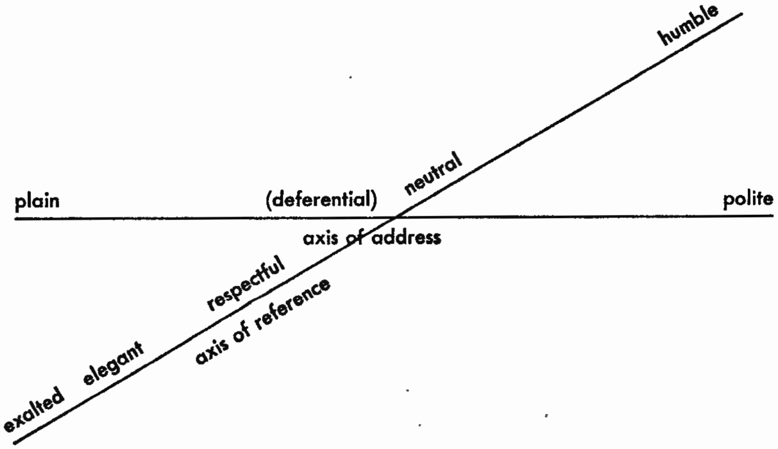
Leonard Bloomfield, attempting to delimit the often overlapping areas of concern of literary study, philology, and linguistics, once defined "literature" with characteristic precision and dispatch as "beautiful or otherwise notable utterances," and added that "the student of literature . . . concerns himself with the content and with the unusual features of form [of such utterances]." However favorably or unfavorably the connotations of this statement may strike the student of literature, it still serves the very important purpose of pointing out the fact that probably in every language there are "beautiful or otherwise notable utterances," and that most cultures have attached particular value to the production of such language. In fact, Bloomfield's precise categorization helps direct our attention not only to one aspect of the nature of literature but also to the important fact of the existence of a wide variety of "utterances" which are somehow "notable" or "unusual"—especially involved or especially restricted utterances, or specimens of discourse which in some way or other present unusual utilizations of the resources of language for special purposes.

Japanese is rich in examples of such special uses of language, and they cover a wide range of subject matter and content. Often they are systems of great complexity, in many cases still inadequately described. Some presuppose fairly detailed knowledge of certain nonverbal aspects of Japanese civilization and hence are difficult to summarize without elaborate excursions into other areas of the culture. Some of them, however, can be presented, even if only in outline, as examples of typically Japanese varieties of such "notable" uses of language. We shall here attempt to survey a few of these—in particular the system of speech levels, generally but somewhat misleadingly called "honorific language" (*keigo*); the closely allied system of men's and women's speech; a variety of word play; a few of the many types of impressionistic sound symbolism in which Japanese is particularly rich; and some of the formal literary applications of such "unusual" language.

The most "notable" of all the varieties of special language in Japanese is without question the extremely involved system for categories of speech levels generally referred to as "honorific language." Both this English expression and its Japanese equivalent leave much to be desired, since they suggest that the principal use of these categories is for "curious and oriental" expressions of the type perhaps best parodied in Gilbert and Sullivan's *The Mikado* ("honorable tea," "the august daughter-in-law elect," "your humble servant," and the like), or for other particularly grandiloquent or pompous varieties of speech and discourse. It cannot be denied that in a limited sense elements of this sort do indeed find their place within the system. But to seize upon them for a categorization of the over-all phenomenon is to disguise the fact that this system of speech levels is deeply rooted in Japanese culture, and that it provides a rare opportunity to observe language in its role as an essential and closely integrated element of social behavior.

Any consideration of this variety of special discourse in Japanese must take as its point of departure the postulate that linguistic forms are ordered in classes or sub-classes corresponding to systems or subsystems within the environment. The environment here, of course, is the very special world of Japanese society, and it is the linguistic reflection of this social organization which results in these elaborate and special types of discourse. The interaction of language and culture in this particular sphere has been brilliantly described by Sir George Sansom in a brief statement which he originally relegated to a footnote, but which it would be difficult to improve upon as a summation of the entire phenomenon: "Honorific words and phrases grow out of social habits, and in their turn influence social conceptions."

Linguistically this system of speech levels or "honorific language" is a set of obligatory categories which operate along two principal axes, the "axis of address" and the "axis of reference." The "axis of address" is a set of different stylistic choices chiefly governed by the speaker's attitude toward the person whom he is addressing, while the "axis of reference" is a parallel set of expressive choices largely dependent on the speaker's attitude toward the subject or topic of his discourse. We shall see more below on these factors of choice, which are all-important to the system; but even from this brief account it will be clear that the two "axes" often merge with each other, since the person being addressed easily becomes the topic or subject of the discourse. But even given these complications this two-part analysis is still a useful one in any attempt to describe the working of the system of speech levels in Japanese. A thoroughgoing graphic representation of the system as it functions in the modern language would require a three-dimensional model, and even this would have to be manipulated further to make some provision for intersections of these two "axes" with other elements of the total system. By limiting the representation rather artificially to two coordinates in two dimensions the following graphic scheme may be drawn up:



In Japanese this bi-axial system operates principally within the inflected form classes of verbs, adjectives, and the copula, though it is also found to a certain extent with nouns. Restricting the description to verb and copula for the sake of simplicity, the principal formal categories which are to be observed may be summarized as follows:

AXIS OF ADDRESS

	Plain	Deferential	Polite
Verbs	-*(r)u*	—	-*(i)masu*
Copula	*da*	—	*desu*
	(formal) *de aru*	*de gozaimasu*	*de arimasu*

AXIS OF REFERENCE

	Humble	Neutral	Respectful	Elegant	Exalted
Verbs	*o- . . . suru*	-*(r)u*	-*(r)areru*	*o- . . . ni naru*	*o- . . . asobasu*
Copula	—	*da*	—	*de irassharu*	—

Examples of the forms summarized here would include, for verbs along the axis of address, *mite iru* and *mite imasu* "are, is seeing," or *au* and *aimasu* "meet(s)"; for the copula, *hon da, hon desu, hon de aru, hon de gozaimasu,* and *hon de arimasu,* all "it is a book." Along the axis of reference, for the copula, *sensei da* and *sensei de irassharu* "it's the doctor," while for a typical verb, *kak-u* "write," the possibilities include *o-kaki suru, kaku, kakareru, o-kaki ni naru,* and *o-kaki asobasu,* all "write." And it must be kept in mind that each of these forms is itself fully capable of further elaboration in terms of this same system. Thus *o-kaki ni naru* also presupposes the existence of many additional forms which can be formed on the basis of *naru,* including *nareru, narimasu,* etc., etc. This adds several more dimensions to the entire system, and a surprisingly large number of the many resulting possibilities are actively employed.

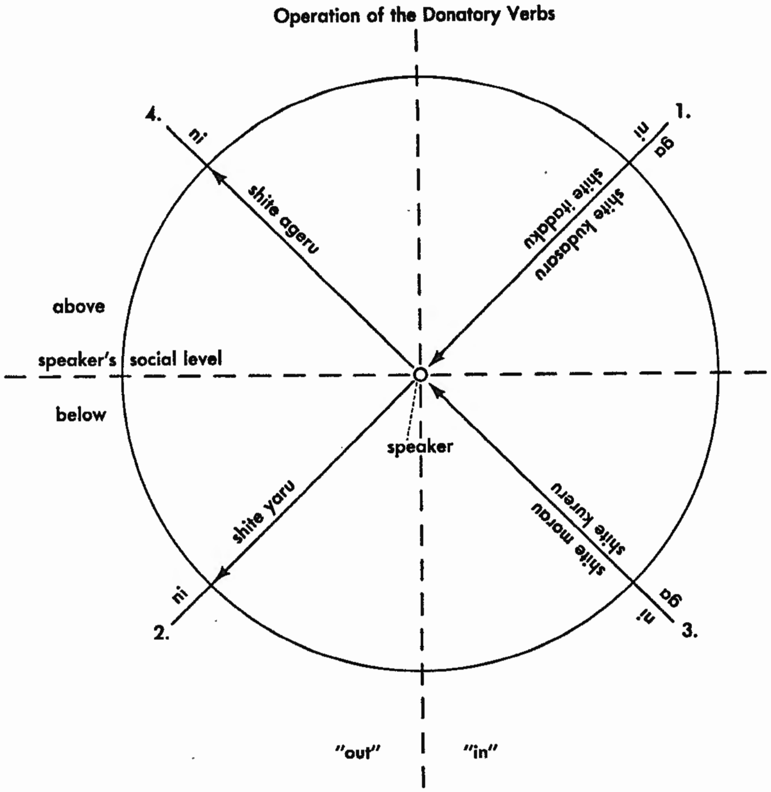
The graphic and tabular summaries above make no attempt to include information about suppletion of forms, which together with the euphemistic verbs (in which there is also much suppletion) complicates the system considerably. Nor does it do more than give a hint, through the designations of levels employed, as to the actual status value of the forms listed. The exalted forms, for example, are in modern Japanese almost entirely limited to references to the Emperor and the Imperial family, though their use in quasi-ironic or other special contexts is also a possibility which cannot be ruled out. For most practical purposes today the elegant level is the outermost limit of the system. It must also be pointed out that the entire system requires a separate and distinct description for every historical stage of the language, in extremely small segments of time, since the area of usage which it embraces is one that has been particularly sensitive to change.

Even though all the formal features involved in this system of speech levels are obligatory categories of the language, this does not mean that there is no choice possible on the part of the speaker as to which shall be used in any particular instance. As a matter of fact, this very element of choice in the system is its most important feature, as well as the element which makes the system an example of the "notable" use of language. The choice, for example, between plain, polite or deferential forms on the axis of address depends on the speaker's own evaluation of his relationship with and attitude toward the person whom he is addressing. On the axis of reference the choice of whether a humble, neutral, respectful, elegant, or exalted form is to be used depends on the speaker's evaluation of his attitude toward or relationship with that about which he is talking.

The system is further complicated by several other factors. One is the existence of a system, with a three-level distinction on the axis of reference, embracing several verbs having to do with "to give" and "to get," which are further divided into two main areas depending on whether the giving or getting is "in-group" or "out-group." These verbs, which may be called "donatory," are often used in their own right for "give" and "receive," but in addition and more importantly they are productively employed in paraphrastic syntactic structures following the gerunds of various verbs, to indicate the direction of the action or operation expressed by those verbs, and in particular to make clear the orientation of the verbs within the over-all system of levels of speech.

Donatory ("give" and "get") Verbs

Humble	*ni . . . ageru*	("out-giving")		
Neutral	*ni . . . yaru*			
	ga . . . kureru	("in-giving")	*ni . . . morau*	("in-getting")
Elegant	*ga . . . kudasaru*		*ni . . . itadaku*	


Operation of the Donatory Verbs
1.
ni
ga
shite itadaku
shite kudasaru
4.
ni
shite ageru
above
speaker's social level
below
speaker
shite yaru
ni
2.
shite kureru
shite morau
ga
ni
3.
"out"
"in"

In this graphic representation of the operation of the donatory verbs the arrows indicate the direction of the actual transfer of action, information, or the like, with respect to the speaker and the person spoken of. The numbers on the periphery of the circle represent four possible situations of person spoken of; in 2) and 3) the person spoken of is below the speaker socially, and in 1) and 4) he is above. The gerund *shite* in the diagram represents any gerund used with following donatory verbs. Thus, with *oshie-ru* "teach," with 1), *sensei ni oshiete itadaku* "(I) am taught by the teacher," and *sensei ga oshiete kudasaru* "the teacher (is good enough to) teach(es) me"; with 2), *otōto ni oshiete yaru* "(I) teach my younger brother"; with 3), *otōto ni oshiete morau* "(I) am (get) taught by my younger brother," or *otōto ga oshiete kureru* "my younger brother teaches me"; and with 4), *sensei ni oshiete ageru*, "(I) teach the teacher (something)."

Another extremely important complicating factor in the system is the existence of a considerable number of euphemistic verbs, most of which also have three possible forms along the axis of reference. In many cases Chinese loanwords are used for one or more members of these euphemistic sets, which provide multiple expressions on several levels for identical semantic referents. It is difficult to categorize such forms as being particularly restricted to the humble or elegant level, but they are rarely if ever neutral.

EUPHEMISTIC VERBS

	Humble	Neutral	Elegant
"Do"	*itasu*	*suru*	*nasaru*
"Say"	*mōsu*	*iu*	*ossharu*
"Know"	*zonjiru*[1]	*shiru*	*gozonji* . . . (+ copula forms)
"Look at"	*haiken* . . . (+ *suru* forms)	*miru*	*goran* . . . (+ . . . *ni naru* forms)
"Come"	*mairu*	*kuru*	*irassharu*, or *oide* . . . (+ . . . *ni naru* forms)

[1] That is, *zon* (a Chinese loanword) plus a back-formation version of *su-ru* on the basis of its *shi-* forms, with initial voicing following *-n*.

These euphemistic verbs expand even more the over-all productive possibilities of the system, since each of these forms is capable of further exploitation along the axis of address, and generally also in combination with the donatory verbs. Thus this list implies, for example, *itashimasu* as well as *itasu* and *shimasu* as well as *suru*, and in the same way both *nasaru* and *nasaimasu* (some of these forms have slightly irregular inflections; cf. in the donatory verbs *kudasaru* and *kudasaimasu*), as well as *mōshiageru*, *mōshiagemasu*, etc., each form having a correspondingly different meaning and role in the system of speech-level categories.

There are important intersections among all these sub-systems, as well as cases of suppletion which are generally "made up" by calling on the resources of some other portion of the system. A complete description of these categories would require precise statements involving a great amount of socio-linguistic data, in order to point out exactly where such collisions or blank spaces occur.

It is curious to note that this elaborate system of speech levels has traditionally and historically existed side by side with a remarkable repertory of words more or less equivalent to what would be called pronouns in Indo-European languages. Actually, the effective use of these various verb forms in most cases makes it totally unnecessary to have overt words for reference to speaker, person spoken of, or person spoken to. Indeed, in much early literature, and particularly in the late Middle Japanese prose of the Heian period, the use of these levels in the verbal categories makes the reference even of extremely complicated sentences immediately clear. Thus if words for pronoun reference are used here at all we may be confident that they were added with a conscious effort at a still further elaborated literary effect. Modern students of classical Japanese literature have often labeled it "vague" or "unclear" because of their lack of attention to these differences of level in the verbal categories, but such descriptions of the literature give a misleading idea of the actual structure of the language in which it is written.

Certain nouns, notably many of those having reference to the Japanese kinship system, also show much the same general kind of division into categories for levels of speech as do the verbs and the copula. Many kinship terms fall into pairs in which the humble member is used for "my (father, mother, etc.)," and the elegant member is used for "your (father, etc.)." For third-person reference the rules become more complicated, depending primarily upon whether or not the "he" of "his (father, etc.)" is considered to be a member of the speaker's in-group or of the in-group of the person to whom the discourse is addressed, and furthermore on whether or not speaker and person spoken to are members of the same in-group:

	Humble	Elegant
"Father"	*chichi*	*otōsan* (*<o-toto-san*)
"Mother"	*haha*	*okāsan* (*<o-kaka-san*)
"Elder brother"	*ani*	*niisan*
"Elder sister"	*ane*	*nēsan*
"Younger brother"	*otōto* (*<otohito*)	*otōtosan*
"Younger sister"	*imōto* (*<imohito*)	*imōtosan*
"Wife"	*kanai*	*okusan*

Here *kanai* is a Chinese loanword (roughly, "the interior of the house"); meanwhile *waifu* from English "wife" is rapidly gaining ground in upper and upper-middle class urban speech as a genuinely neutral term which makes it possible to avoid involving husband-and-wife relationships in the system of speech level categories. The etymology indicated above for *otōto* and *imōto* is the traditional one. Phonetically it raises certain problems, and on this basis as well as in terms of synchronic description it is probably better to recognize here a suffix with the morphophonemic shape //-wuto//, seen also in such terms as *shirōto* "amateur" (*shiro-i* "white, pure") and *kurōto* "expert" (*kuro-i* "black"). The element *oto-* may be compared with *otor-u* "be less, inferior to" and *ototoi* "day before yesterday"; Old Japanese has a form *imo* which is an intimate vocative for women. This suffix //-wuto// itself may of course ultimately be related to *hito* < *Fitö* "person."

The deferential noun prefix *o-*, as seen in some of the elegant members in this selection of kinship terms and as used with other nouns as well, is historically the result of several diverse inheritances. Old Japanese has instead *mi-*, which also appeared together with *ō-*<*öFo* "great" as *ōmi-*. From this combination, by successive developments, arose *ōn-*>*on-*, giving finally, partly as a result of the "false division" of this *on-*, the form *o-*. In other instances, difficult to distinguish, the form *on-* itself was a secondary one arising from *o-* preceding examples of the pre-nasalization phenomenon. This *o-*, both here and elsewhere, was also sometimes historically a shortened version of *ō-* "great."

As one result of the large-scale penetration of Chinese loanwords into the Japanese vocabulary this deferential prefix *o-*, regardless of origin, came to be specialized as a morphologically determined allomorph largely restricted to prefixation to forms which were originally Japanese. A few surviving cases of *on-* continued to exist in parallel with it but limited to other morphologically determined combinations. In the meantime the Chinese loanword *go-*, associated with a Chinese written character meaning "royal, imperial," came to serve as still a third allomorph of this same prefix before Chinese loanword morphemes. This *go-* is an older or *go'on* pronunciation. In a few compounds one also meets the parallel but unproductive *kan'on* pronunciation *gyo-*, but this is now almost entirely limited semantically to "imperial," as in *gyoen* "imperial gardens." The system is now an arbitrary morphological distribution of forms rather than an etymologically true division, since a fair number of "well naturalized" Chinese loanwords now take instead the *o-* or *on-* allomorphs, as for example *o-cha* "tea," *o-rei* or *on-rei* "thanks," and *o-sentaku* "laundry." (The original Old Japanese *mi-* meanwhile also survives in such words as *mikado*, originally the deferential prefix plus *kado* "gate.") And this same element *o-* of course plays an important role in the verb forms for the different levels summarized above.

Two chief varieties of the deferential prefix *o-* in combination with nouns must be distinguished—1) an inseparable *o-*, which cannot be removed from the noun with which it appears without changing the lexical item (*naka* "middle," *o-naka* "stomach"; *share* "wit, pun," *o-share* "a dandy, fancy dresser"; *tsuri* "fishing, angling," *o-tsuri* "change [small money]"), and 2) a separable *o-*, whose use with a noun is a matter of choice and which therefore plays an important role in the system of levels of speech. This second variety is found with a wide variety of items (*o-zubon* "trousers," *o-bōshi* "hat," *o-mune* "breast," *o-mizu* "[drinking] water," *o-cha* "tea," *o-biiru* "beer," *o-kashi* "candy"), and is far more frequent in women's speech than in men's. There are also instances in the first category where there is no etymologically related parallel form without the *o-*, and, depending on the analysis preferred, some of the examples cited above such as *tsuri*, *o-tsuri* could equally well be included under this sub-category.

Still a further complication is introduced by sets like *kane* "metal" and *o-kane* "money," but where *kane* alone is also sometimes used to mean "money." Historically we probably have to reckon here with a semantic back-formation, with the sense of *kane* in *o-kane* coming to be attached to the unprefixed form also. The problem in this particular case is also further complicated by the fact that "money" was anciently the most important and most highly specialized form of "metal" known to society in the Far East, but on the descriptive level at least these simply form another sub-class in the usage of the deferential prefix.

An interesting study reported on by Shibata Takeshi concerning the ways in which the deferential prefix *o-* is used in modern standard Japanese provides a great deal of information, with many applications to other segments of the system of speech levels as well. Shibata tested the use of the deferential prefix with 4,830 vocabulary items chosen at random. He used a disappointingly small number of informants—only 18, as a matter of fact, all women either married or "having experienced marriage," and all living currently in Tokyo. Even though only this small number of subjects was tested the results have a somewhat greater validity than might be expected, since care was taken to insure that representatives of as wide a geographical range and as many levels of education and social status as possible were included among the subjects.

The results of this survey verified, for example, that the deferential prefix is used much more sparingly with loanwords from foreign languages than with native Japanese vocabulary items. It also showed that there is a tendency to use it more freely before words which do not themselves begin with the syllable *o-* than before forms which do begin with that syllable. It also is used more widely with forms of three syllables or less than with longer forms.

On the semantic level the testing was carried out in terms of a somewhat shorter list of 1,100 "basic" vocabulary items developed by Doi Kōchi largely for the purposes of teaching Japanese as a foreign language. The subjects were tested for their willingness or reticence to use the deferential prefix with each of the items on this list (Table 4). These results were then tabulated according to the 39 semantic categories into which this list of "basic" vocabulary items is divided.

The Doi list of "basic" vocabulary items classifies many items under headings perhaps somewhat surprising to anyone unfamiliar with Japanese social customs and traditional thought patterns. Hence in order to interpret the data it is necessary first to list a few representative items from each of these 39 semantic categories:

1 Man: *ani* "elder brother," *aite* "other party (in a suit or discussion)," *otto* "husband."
2 Body: *atama* "head," *ke* "hair," *kao* "face."
3 Dwellings: *ie* "house," *yane* "roof," *to* "door."
4 Clothing: *obi* "belt," *sode* "sleeve," *kutsu* "shoes."
5 Tools: *fude* "writing brush," *kami* "paper," *pen* "pen."
6 Furniture: *kagami* "mirror," *kagi* "key," *koppu* "drinking glass."
7 Food: *kome* "uncooked rice," *mame* "beans," *imo* "potatoes."
8 Drink: *sake* "rice wine," *shiru* "soup," *tabako* "cigarettes."
9 Meals: *ryōri* "cooking," *aji* "taste," *kamu* "to chew."
10 Nature: *sekai* "world," *hoshi* "star," *hi* "fire."
11 Earth's Surface: *tsuchi* "earth," *kawa* "river," *tokai* "city."
12 Minerals: *kin* "gold," *dō* "bronze," *tetsu* "iron."
13 Plants: *ki* "tree," *tane* "seed," *kinoko* "mushrooms."
14 Animals: *tori* "bird," *mushi* "insect," *uma* "horse."
15 Numbers and Quantities: *ōi* "many," *ichi* "one," *mētoru* "meter."
16 Time: *toshi* "age," *haru* "spring," *nen* "year."
17 Form: *sugata* "appearance," *dai* "platform," *sumi* "corner."
18 Color: *ao* "blue, green," *shiro* "white," *kuro* "black."
19 Sound: *koe* "voice," *uta* "song," *rajio* "radio."
20 Position: *hajime* "beginning," *chūshin* "center," *kita* "north."
21 Travel: *yado* "inn," *kippu* "ticket," *fune* "boat."

22 Communications: *yūbin* "mail," *denwa* "telephone," *kitte* "stamp."
23 Machinery and Industry: *kenchiku* "architecture," *kuruma* "vehicle," *semento* "cement."
24 Organization: *mura* "village," *shakai* "society," *zoku* "tribe."
25 Society and Culture: *kami* "deity," *seiji* "government," *tsumi* "guilt."
26 Knowledge: *oshie* "teaching," *kotoba* "word," *kana* "syllabic script."
27 The Mind: *ishiki* "consciousness," *kannen* "concept," *yume* "dream."
28 Mental Operations: *miru* "see," *kiku* "hear," *negai* "request."
29 Emotions: *ai* "love," *ikari* "anger," *tanoshimi* "happiness."
30 Sensations: *atatakai* "warm," *kayui* "itchy," *nigai* "bitter."
31 Manual Operations: *ageru* "lift up," *kiru* "wear," *motsu* "hold."
32 Foot Operations: *odori* "dance," *noru* "ride," *kuru* "come."
33 Physical Operations: *iki* "breath," *tsukare* "weariness," *nemuri* "sleep."
34 General Operations: *aru* "to be, to have," *iru* "to be," *tsuzuki* "continuation."
35 Actions: *kō* "filial piety," *matsuri* "religious festival," *naku* "to cry."
36 State and Quality: *takai* "high," *byōki* "sickness," *jōhin* "high class."
37 Relationships: *shu* "master," *sakai* "boundary," *moto* "basis."
37 General: *tokubetsu* "special," *imi* "meaning," *shina* "article."
39 Miscellaneous: *ato* "traces," *kādo* "card," *hai* "ashes."

In Table 4 the three vertical columns represent, in order, the percentages of the items tested in each semantic category for which none of the informants would use the deferential prefix (Score 0); for which one or more and up to eleven of the informants would use the deferential prefix (Score 1–11); and finally, for which twelve or more and up up to all eighteen of the informants would use the deferential prefix (Score 12–18). Thus, for example, under Category 1. Man, 65.2 per cent of the items tested were not used with the prefix by any of the informants; 30.2 per cent of the items tested took the prefix in the speech of between one and eleven of the informants, and 4.6 per cent took the prefix in the speech of between twelve and eighteen of the informants.

TABLE 4

Usage of Deferential Prefix by Semantic Categories

Scores	0	1–11	12–18	Total
Categories				
1. Man	65.2	30.2	4.6	100.0
2. Body	58.8	40.0	1.2	100.0
3. Dwellings	47.4	46.2	6.4	100.0
4. Clothing	47.5	52.5	0	100.0
5. Tools	62.4	37.2	0.4	100.0
6. Furniture	50.0	37.5	12.5	100.0
7. Food	63.3	28.6	8.1	100.0
8. Drink	59.1	40.9	0	100.0
9. Meals	32.0	52.0	16.0	100.0
10. Nature	91.4	8.6	0	100.0
11. Earth's Surface	88.5	10.4	1.1	100.0
12. Minerals	90.5	9.5	0	100.0
13. Plants	91.2	8.8	0	100.0
14. Animals	92.4	6.5	1.1	100.0
15. Numbers and Quantities	50.0	50.0	0	100.0
16. Time	70.1	26.8	3.1	100.0
17. Forms	83.3	16.7	0	100.0
18. Colors	92.0	8.0	0	100.0
19. Sound	72.1	26.3	1.6	100.0
20. Position	60.7	36.9	2.4	100.0
21. Travel	73.5	24.5	2.0	100.0
22. Communications	52.4	42.8	4.8	100.0
23. Machinery and Industry	90.8	9.2	0	100.0
24. Organization	85.0	15.0	0	100.0
25. Society and Culture	65.3	31.2	3.5	100.0
26. Knowledge	62.0	36.4	1.6	100.0
27. The Mind	26.1	73.9	0	100.0
28. Mental Operations	13.7	73.7	12.6	100.0
29. Emotions	11.5	77.0	11.5	100.0
30. Sensations	55.6	44.4	0	100.0
31. Manual Operations	60.6	36.4	3.0	100.0
32. Foot Operations	70.0	30.0	0	100.0
33. Physical Operations	22.2	70.4	7.4	100.0
34. General Operations	49.5	47.7	2.8	100.0
35. Actions	35.8	60.6	3.6	100.0
36. State and Quality	55.0	42.8	2.2	100.0
37. Relationships	51.3	48.7	0	100.0
38. General	40.0	56.6	3.4	100.0
39. Miscellaneous	57.4	41.7	0.9	100.0

Such data make it possible to form certain conclusions about the general tendencies governing the use of the deferential prefix in these general semantic categories. For example, if under the column with Score 0 relatively large percentages are observed, say in the range of 80 per cent or more, this indicates those semantic categories in which use of the deferential prefix meets fairly stiff opposition. These are the categories of Nature, the Earth's Surface, Minerals, Plants, Animals, Forms, Colors, Machinery and Industry, and Organization. If from among these we then further isolate the sub-group which under Score 12–18 has the lowest percentages we find that the semantic areas of Nature, Minerals, Plants, Forms, Colors, Machinery and Industry, and Organization are thus clearly isolated, so that these then become those categories which among the 39 listed offer maximum resistance to the use of the deferential prefix. In the same way the data provide a clue to those categories in which the deferential prefix is most favored. Under Score 12–18 the categories with percentages of 7 or over are Furniture, Food, Meals, Mental Operations, Emotions, and Physical Operations. If we further refine this group by focusing our attention next on those categories which in the Score 0 column have percentages of 45 or less we are left with Meals, Mental Operations, Emotions, and Physical Operations as the categories most favored for the deferential prefix.

Other conclusions which may be drawn from this same study are that the deferential prefix is used with about 40 per cent of the total vocabulary, taking the larger sample used in the investigation as totally representative of the whole language. Even within this 40 per cent there is wide individual difference, so that only 0.4 per cent of the larger vocabulary sample was always used on all occasions with the deferential prefix by all the informants.

In studying language as a reflection of society and its structure, and especially in considering the operative factors in this special variety of discourse, our attention must of course immediately be directed to those items which are active elements of choice in this entire system of speech levels. In other words, what factors operate to influence a speaker's choice of verb forms along the reference and address axes, or to influence his choice or rejection of the deferential prefix? Samuel E. Martin, to whom we are indebted for our best description to date of the entire system, has estimated the relative importance to the system of speech levels of age difference, sex difference, social position, and out-groupness, roughly as follows:

Reference Axis	Address Axis
position	out-groupness
age difference	position
sex difference	age difference
out-groupness	sex difference

He adds, "I am not too happy with these estimates and I suspect that much of the dissatisfied feeling among older people [in Japan today—RAM] that 'politeness levels' are changing is due to changes in the relative importance of these various factors, and also perhaps to changes in feelings of what constitutes an in-group and an out-group."

Modern Japanese scholars have shown considerable interest in the nature and functioning of this system of "notable utterances" in their language, especially in the elements of choice which provide the system's chief operational dynamic. One of these studies, a major one undertaken by the National Institute for the Study of Japanese, was carried out in 1952 and 1953 among non-standard language speakers in Mie and Aichi Prefectures. The data from this field work were later correlated with evidence from other nation-wide studies and then elaborately analyzed by a variety of modern statistical techniques, in an attempt to determine what if any correlations existed between choice of speech levels in different social situations and the sociological and psychological data obtained concerning the informants.

The great care and detail which were lavished on this analysis went far to mitigate the inherent weakness of the study, one probably common to all such attempts at measuring what in this case was called the "consciousness" (*ishiki*) of native speakers to their own use of their own language. This weakness chiefly derives from the inescapable necessity at almost every stage of the study, both on the part of the native speakers being observed and on the part of the scholars doing the investigation, for introspection about what is going on in the minds of speakers when they speak. Because of this many of the results must inevitably be expressed in rather unsatisfactory terms having to do with how various "expressions" are "felt." In spite of these shortcomings the findings of this study, published in 1957 under the title *Keigo to keigo ishiki* (Honorific Language and Consciousness of Honorific Language), are still worthy of attention since they do throw into sharp relief many of the important dimensions of the functioning of this system in modern Japan.

The original study summarized its findings in the form of 25 "conclusions." The following list of 14 items translates and further summarizes these findings, omitting several which in the original are reported in extremely vague language, or consolidating under a single item others to which the original report assigned separate numbers:

1. Forms which incorporate negatives, generally to be understood in a rhetorical sense, are felt to be on a higher level of politeness than those without such negatives.
2. The longer an utterance, the more polite it is felt to be.
3. Utterances involving non-standard dialect forms or other non-standard features are considered less polite than otherwise equivalent utterances in the standard language.
4. Utterances involving Chinese loanwords are considered more polite than equivalent utterances without them.
5. The degree of attention paid to levels of politeness seems to be in direct proportion to the degree to which one feels that he is in a "psychologically weak" position, i.e., asking or receiving a favor, or the like; conversely, when one is in the opposite kind of a situation ("when one has caught the other party in a mistake, or when one is doing a favor for the other party") usage becomes "comparatively rough."
6. Strangers are accorded more polite usage than persons better known to the speaker.
7. Distinctions of usage toward the person spoken to become more finely drawn as one moves geographically in Japan from east to west.
8. The most important factor in determining a speaker's honorific usage is the speaker's sex; the least important is the speaker's age.
9. Men show greater discrimination in situations calling for different varieties of discourse, while women tend to more uniform usage regardless of situation.
10. Knowledge of the different forms available is primarily a matter of education and social background, while attitudes toward these forms differ greatly with age level.
11. In general, the more elaborate the form of discourse, the more it pleases the people for whom and to whom it is used, but only so long as it is in the standard language; dialect forms are displeasing.
12. Those who are most pleased by elaborate usage of this variety tend to correspondingly elaborate usage of their own.
13. Difference in social class is generally felt to be the overriding factor in the application of the total system.

14. The "rigid" personality type (one slow to grasp a change of situation in a psychological test, for example) tends to be less skillful at making full use of the possibilities of the system than someone who is more flexible in this respect.

This particular variety of discourse, like so many aspects of Japanese life, has not escaped the attention of the government official and bureaucrat. In 1957, the same year the study summarized above appeared, the Japanese Ministry of Education issued a document entitled *Kore kara no keigo* (Honorific Language from Now On), proposing various guidelines along which the system of levels of speech ought, in its view, to be encouraged to develop in the future. To some extent, this type of official pronouncement simply demonstrates the abiding interest shown by almost all levels of Japanese society in matters relating to language. It also rather naively assumes that anything can be done by fiat to guide or control future developments in any variety of language, not to mention one as deeply involved with the structure of the society as this one. Many of these official "suggestions" concerning speech levels show considerable confusion not only about the nature of language and society but also about historical change in both. Some of them nevertheless give added insight into this variety of special discourse in Japanese.

There are, to be sure, local non-standard dialects in Japan which have systems of levels of speech strikingly different from that in the standard language, or in a few cases which appear to be virtually without any feature of this type. Directives of the *Kore kara no keigo* variety certainly provide guidance for educators working in such areas, as they do also of course for radio announcers and others actively participating in mass communications; but apart from such specialized instances it is difficult either to foresee or to demonstrate any great impact for such dicta.

These 1957 recommendations concerning the "future" of levels of speech begin with four general pronouncements of attitude. These are by and large devoid of linguistic interest since they are little more than exhortations to virtue which attempt to correlate the system of speech levels in the Japanese language with the maintenance and enhancement of human and individual rights in Japanese society. Thus, one of the opening statements says, "In business dealings and the like it is particularly noticeable that on many occasions some make improper use of elaborately honorific speech or improper use of unnecessarily humble speech from a mistaken sense of service. By so doing such persons often lose sight of their own basic dignity as human beings, which is extremely regrettable. In such matters we must ask for general attention on the part of all the Japanese people."

In their more concrete portions the Ministry of Education's suggestions deal with the following points, among others, given here in a fairly literal but completely unofficial translation:

1. For first-person reference *watashi* is to be the standard form; *watakushi* is to be used only on formal or ceremonial occasions. In women's language the forms *atakushi* and *atashi* are to be permitted, but as a general principle the forms *watashi* and *watakushi* are to be preferred for both men and women. The form *boku* for first-person reference is suitable for use among male students but when they leave the university and enter society they should be instructed to make uniform use of the form *watashi.*

2. The word *jibun* "self, myself" in the sense of *watashi* is to be avoided.

3. For second-person reference the standard form is to be *anata.* In writing letters, both official and personal, such forms as *kiden* and *kika* [both literary loanwords meaning roughly "esteemed highness"] which have been used until now would be better avoided from now on; in letters too the standard form *anata* should be used. For second person the form *kimi* should continue to be used only in friendly or intimate situations on the same level at which the form *boku* for male first-person reference is used; but apart from these special contexts in general the standard forms *watashi* and *anata* should be used. In this same connection such forms for first person as *ore* and *omae* for second person are to be replaced gradually with *watashi* and *anata.*

4. For addressing persons the suffix *-san* is to be considered the standard form; the form *-sama* may continue to be used for formal occasions or in fixed phrases where it now appears, but principally it is to be limited to addressing letters. On official correspondence where the form *-dono* has traditionally been used in the address, it is desirable in the future to replace this also with *-sama.* The word *-shi* for personal address is to be considered a written word and in conversation it is to be replaced with *-san.* Also, in address situations the form *-kun* is to be allowed among male students or among other young people in similar social situations, but upon leaving school and entering society as a general rule it should be replaced by *-san.* In the case of both men and women it is not considered suitable to

affix *-san* to the titles of employers or supervisors, such as *sensei* "teacher," *kyokuchō* "department head," *kachō* "section head," *shachō* "company president," and the like.

5. The suffix *-tachi* for plural is in the modern spoken language suitable for use with words of first-person reference, thus *watashi-tachi*. The suffix *-ra* in a similar sense is to be considered part of the written language.

6. The use of the deferential prefix *o-* and its allomorph *go-* in Chinese loanwords is to be considered more carefully than it has been up to now. In the following cases it is considered proper to continue its use:

i. When the deferential prefix if paraphrased would have the meaning of *anata no* "your," as, for example, in such expressions as *o-bōshi wa dore deshō ka* "which is your hat?" or *go-iken wa ikaga desu ka* "what is your opinion?"

ii. When it "truly expresses deference or respect," as for example in *sensei no o-hanashi* "teacher's lecture," or *sensei no go-shusseki* "(the honor of) teacher's presence (at a meeting, etc.)."

iii. In cases where fixed phrases or common idioms make it advisable to continue its usage. Examples include *o-hayō* "good morning," *o-kazu* "food," *o-tamajakushi* "a tadpole," *go-han* "cooked rice, a meal," *go-ran* "look (elegant)," *go-kurō sama* "your hard work." Also here are to be included all of the elegant verbs in *o-* + . . . *ni naru* or in the case of Chinese loanwords those based on *go-* + . . . *ni naru*.

iv. In cases where the word to which it is attached actually has reference to something of the speaker's but where in traditional usage it has been employed because this item has some particular reference to the person spoken to. Such examples include *o-tegami o sashiage-mashita ga* "I wrote you a letter . . . ," *o-negai* "my request," *go-hōkoku itashimasu* "I report."

There are also cases in which if the deferential prefix can be omitted it is now recommended that it should be omitted under certain circumstances. Examples here include many words having to do with items of food or dress with which in women's language it is considered still necessary to use the deferential prefix but where it is possible to omit it in men's language; in men's language this possibility should in future always be utilized. Examples include *o-kome* "uncooked rice," *o-kashi* "candy, cake," *o-chawan* "rice bowl," and *o-hiru* "noon."

Finally there are those instances in which it is recommended that the deferential prefix simply be omitted from now on. Examples include *chokki* "vest" [a loanword of obscure origin, perhaps somehow based on English *jacket*], *kutsushita* "stockings," *biiru* "beer," *reisoku* "your son," and the like. The recommendation is that such expressions as *go-sotsugyō sareta* be avoided and replaced either with *sotsugyō sareta* or *go-sotsugyō ni natta,* all meaning "you, he graduated from school."

General conversation should be on the level which uses *-masu* for verbs and *desu* for the copula [i.e., what is generally called by non-Japanese linguists the polite style]. This recommendation is not to be taken as casting discredit upon continued use of more elaborate forms such as *de arimasu* in public speaking or *gozaimasu* for formal and ceremonial occasions or suggesting that *da* for the copula and the corresponding plain verb forms necessarily be avoided in social situations where their connotations of familiarity are not out of place.

7. [For the verb the respectful, elegant, and exalted levels, are discussed and characterized as follows:] the respectful level has the disadvantage of possible confusion with passive forms (of which it is a special use) but it has the advantage of being uniformly applicable to all verb forms and also the advantage of simplicity. Because of this it is felt to have "possibilities for the future." On the elegant level there is no reason further to expand these forms by making them, for instance, into such forms as *o-* + . . . *ni nareru,* etc. The exalted level is an exaggerated type of expression which is not to be encouraged in the future and will gradually drop from usage.

8. Forms in which the adjective is followed by the copula such as *ōkii desu* "it is big," *chiisai desu* "it is small" and the like are to be approved in future because of their simplicity and are to be preferred over longer forms such as *ōkiin desu, ōkii na no desu* and the like.

9. Greetings, which generally involve some levels of honorific speech, are to be left as they are and are to be recognized as fixed expressions. Such include *o-hayō* or *o-hayō gozaimasu* "good morning," *o-yasumi, o-yasumi nasai* "good night," *itadakimasu* "let's eat," *go-chisō sama* "(fixed greeting at the end of a meal)," *itte kimasu* and *itte mairimasu* "(fixed greeting on leaving a house)," *itterasshai* "(reply to above by person remaining in the house)," and the like.

The 1957 study of "consciousness" of honorific language on the part of the Japanese revealed the existence of considerable psychological resistance to some of these recommendations, notably to that which recommends that *-san* be omitted from the titles of one's superiors or employers when speaking about them to outsiders. In this connection as well as in others it will be interesting to see in what ways, if any, actual future developments in usage follow the course outlined in these "suggestions."

One factor which today is seriously agitating the entire area of this variety of special language is the growing amount of contamination of traditional Japanese behavior patterns by European and American models of social conduct. To some extent this enters into daily life in any modern Japanese urban center, where motion-picture and television samples of "life in the West," even apart from the actual physical presence of foreigners, provide the almost constant stimulus of non-Japanese behavior patterns, all of which is slowly but inevitably having an effect. Naturally, this situation gives rise to serious problems in the present usage and probably also in the future development of this particular variety of special discourse. How, for example, is a Japanese airline stewardess to speak—how is she to speak to her Japanese passengers in Japan, how is she to speak to her Japanese passengers when not in Japan, and how is she to balance her levels of usage toward them, in Japanese, with her linguistic usage in a foreign language toward her non-Japanese passengers?

A recent issue of a semi-scholarly journal which devotes itself to what its title calls *Gengo seikatsu*—literally, "Language Life," but probably best understood as meaning something halfway between "Life in Language" and "Language in Life"—quotes a stewardess on the Japanese overseas airline on precisely this point. Foreign passengers expect "service with a smile"; but in Japan smiling is not traditionally associated with good humor or a friendly attitude but rather with embarrassment and social discomfort, or even, in extreme instances, with genuine tragedy and sorrow, or with repressed anger. So, as she puts it, "it is difficult to smile when you have to say *gozaimasu*." In other words, when the Japanese system of social behavior demands special levels of speech such as the use of deferential words like *gozaimasu*, it also in general requires a poker face. The same social situation in the West (and for her foreign passengers regardless of where they may be) requires not special verbal responses but a winning smile.

Unfortunately neither the "suggestions" of the Ministry of Education on the future of the levels of speech nor the surveys of the

National Institute for the Study of Japanese appear to have very much in the way of concrete assistance to offer this troubled young working girl. There is little to do but to sympathize with her in her very real personal dilemma, which reflects within its tiny dimensions the entire pluralistic dilemma in which modern Japan finds itself.

Another important part of the system of speech levels is the distinction between men's and women's speech. Partly these differences operate within the larger system of speech levels. For example, women make more use of the deferential prefix *o-* and of elegant and exalted verb forms than do men, etc., and certain of these aspects have already been touched upon above in our brief summary of the levels system. But sexual differentiation in Japanese speech also includes different sets of sentence-final particles for men (. . . *zo*, . . . *yo*, . . . *ze*, etc.) and for women (. . . *wa*, . . . *no*), as well as different repertories of interjections for each group. Women also favor variant pronunciations of certain forms (*gozāmasu* for *gozaimasu*). But in general the differences between men's and women's speech are too far-reaching and too closely interdependent upon content and style to admit of any simple summary. Put most briefly, women in Japanese society traditionally talk about different things than men do, or at the very least, they say different things even when they talk about the same topics. This makes it difficult and even pointless to attempt to give typical equivalent expressions in men's and women's speech, since in most situations the content and topic will differ as much as would the formal verbal expression.

The following brief text is a good example of fairly elegant but otherwise quite run-of-the-mill women's speech:

A	A
mā, go-rippa na o-niwa de gozāmasu wa nē. shibafu ga hirobiro to shite ite, kekkō de gozāmasu wa nē.	My, what a splendid garden you have here—the lawn is so nice and big, it's certainly wonderful, isn't it!
B	B
iie, nan desu ka, chitto mo teire ga yukitodokimasen mono de gozaimasu kara, mō, nakanaka itsumo kirei ni shite oku wake ni wa mairimasen no de gozāmasu yo.	Oh no, not at all, we don't take care of it at all any more, so it simply doesn't always look as nice as we would like it to.

A	A
ā, sai de gozaimashō nē. kore dake o-hiroin de gozāmasu kara, hitotōri o-teire asobasu no ni datte taihen de gozaimashō nē. demo mā, sore de mo, itsumo yoku o-teire ga yukitodoite irasshaimasu wa. itsumo honto ni o-kirei de kekkō de gozāmasu wa.	Oh no, I don't think so at all —but since it's such a big garden, of course it must be quite a tremendous task to take care of it all by yourself; but even so, you certainly do manage to make it look nice all the time: it certainly is nice and pretty any time one sees it.
B	B
iie, chitto mo sonna koto gozāmasen wa.	No. I'm afraid not, not at all . . .

This English version, a fairly literal if not word-for-word translation of the Japanese, will make clear that in every sense this is a very special kind of discourse. What is being said here is not at all important; the only thing of any concern to either speaker is the way in which it is being said and the number of times the same thing can be repeated. And it is really pointless to ask what the equivalent of all this would be in men's speech, because Japanese men would not carry on in this way about anything, particularly about gardens. A male equivalent text for speaker A would simply be, *ii niwa da nā* "it's a nice garden, isn't it," and that would be the end of it; to this the reply of speaker B, if any, would most likely be a sub-linguistic grunt, as a sign of acknowledgement or of polite denial.

One of the most surprising items which the 1957 study of "honorific language consciousness" turned up is to be found not in the study proper but in one of its appendices, where a tiny portion of the vast body of field work records on which the study was based is printed. This section of the report preserves a few samples of the data recorded in Okazaki city, Aichi Prefecture, in a part of the study which consisted of presenting each of 246 subjects with a situation stimulus and recording their oral responses either in phonetic script or in the Japanese *katakana* syllabary.

The amazing thing which the data make clear is the wide diversity possible in the verbal responses to even the simplest of situations. It is clearly possible to say the same thing in Japanese in a virtually unlimited number of ways, and it is to this fact more than to any other that these data of the survey give eloquent testimony. In almost every instance, with 246 subjects, close to 246 different responses were recorded, with very little or sometimes even no duplication among them. The implication is clear that if there had been a larger number of subjects, the number of different responses would in each case have been correspondingly greater—with 1,000 subjects, close to 1,000 different responses, and so on. This is something that everyone who has worked with Japanese has probably instinctively felt at some time or other, but it is extremely useful to have this intuitive feeling substantiated by such impressive experimental data.

One of the most accurate and useful accounts of the functioning of this entire system of levels of speech in modern Japanese comes not from a linguist but from a journalist; it is worth quoting at some length:

"In Japan, there are at least half a dozen ways of saying 'I' and as many ways of saying 'you.' The way one chooses depends on one's age, sex, and status and on the age, sex, and status of the person to whom one is talking. The verbs that refer to actions in which people are involved with one another also vary in form according to who has performed the action and who is talking to whom. The different forms are, in fact, different words, as they should be, for what they describe are complex social actions whose meaning depends on the human beings concerned and their relations to one another in the social hierarchy. . . . Westerners, of course, can exaggerate the importance of all this. The Japanese do not necessarily bring more emotional commitment to their linguistic habits than does an English parliamentarian who refers to 'the Honorable Member for Brimsby' [in other words, English also has roughly comparable obligatory categories, though they are by no means as thoroughgoing or complex—RAM]. Nevertheless, these forms imprint on all discourse among Japanese a consciousness of social hierarchy. And when the relative positions of speaker and listener are uncertain—a state of affairs that is increasingly common these days—very nice calculations are required." It would be difficult to improve upon this statement of some of the ways in which, thanks to this particular variety of discourse, Japanese language and culture are interrelated.

It is always dangerous to attempt to characterize any language as being especially "fitted for" or particularly "adapted to" a given linguistic device or a specialized variety of discourse. The danger here lies of course in the fact that many such characterizations are clearly *ex post facto*. They are too easily applied solely on the basis of features of behavior in the culture or on themes of currency or popularity in the literature, rather than on the basis of actual forms or arrangements of forms in the language itself. But even after exercising all due caution, it is still difficult to refrain from characterizing Japanese as having a remarkable aptness for many varieties of special or even "notable" utterances involving word play, sound symbolism, and other varieties of linguistic usage which take extraordinary advantage of the resources of the language. This predilection shows itself in many ways. As we shall see below, many of the special devices of classical Japanese literature come under this category. But even apart from these literary uses of conscious and studied manipulation of language, other aspects of the same phenomenon are also worth considering briefly.

There is, for example, a variety of word play involving puns between words of "good" meaning and items of diet, which are then favored in the culture as "auspicious" foods for festivals and holidays because of their phonetic association with these words. The fish called *tai* (the "sea bream" or "red snapper" of the lexicographers) is the *sine qua non* of every celebration in Japan, particularly wedding banquets and New Year's feasts, because of its association with *o-medetai* "auspicious." (It is also delicious, and would no doubt have been quite as popular without this connection, but there is some question if it would then have been as expensive.) The variety of kelp called *kobu,* already introduced with its variant *konbu* in the discussion of the Old Japanese pre-nasalization, has, at least in its hypercorrect non-nasalized form, associations with *yorokob-u* "rejoice." Hence it finds its way not only onto the table but also into New Year's room decorations. The New Year's feast also always includes *mame* "beans," a homophone with *mame* "industrious."

The Pacific varieties of crayfish, shrimps, and lobsters are in the view of most by no means as tasty as their Atlantic cousins, but the *ebi,* in Japanese a general term embracing all these varieties of crustaceans, is considered a particularly auspicious object and it too is often used as an ornament in the Japanese house on New Year's, quite apart from its edible uses. In its case there is an association with *ebisu,* an autochthonous Japanese deity of wealth and happiness. There is an additional purely graphic association with longevity, since *ebi* is written with Chinese characters meaning "ancient one of the sea (*hai lao*)."

Many examples of word play involving puns go beyond the etymological resources of Japanese itself to introduce Chinese or other foreign languages, at least as far as the semantic ranges of some of the forms involved are concerned. Japanese *iro* "color" takes on an extended semantic range of "sexual activity, passion" from Chinese *se* "color; sexual activity"; then this same *iro* becomes available to serve in many puns involving its accidental resemblance to the loanword *ero* from English *erotic.* The original form *iro* in its semantic expansion also reinforces the popularity of the loanword *ero,* so that as a result an *eroshashin* (*shashin* "photograph") is about the same thing as, and may indeed be, an *iroshashin.*

TABLE 5

The *Kuchijamisen* System

	Downstroke Open	Fingered	Upstroke Open	Upstroke Fingered	Lefthand Open	Pizzicato Fingered
First string	*ton* (or) *don*	*tsun*	*ren*	*ro*	*ren*	*rin*
Second string	*ton*	*tsun*	*ren*	*run*	*ren*	*rin*
Third string	*ten*	*chin* (or) *chi*	*ren*	*ri*	*ren*	*rin*

Double stops: *shan*

Another variety of word play is the system of linguistic substitutes for musical notation employed by *shamisen* performers which is called *kuchijamisen* "oral *shamisen.*" In this system, phonemes of the language are put together to form surrogate morphemes (*ton, ten, chin, rin, ren, tsun, shan,* etc.) which are then associated with the three strings of the instrument and with the various strokings and fingerings so as to provide a complete mnemonic oral score for *shamisen* performances, according to Table 5.

Writing, flag codes, drum signaling, and similar devices are familiar examples of secondary systems based on language but using nonverbal media; the *kuchijamisen* is an example of a non-linguistic system—secondary, to be sure, but secondary to a musical system rather than to a language—using verbal media. The *kuchijamisen* has a good deal of homophony (like all linguistic systems), but even within its small confines some "morpheme analysis" is possible; thus *t-* (or *d-*) may be isolated as the morpheme for "down strokes," and *r-* as the contrasting morpheme for "upstrokes, left hand, and pizzicato"; so also the morphophoneme //t-// before *-u-* or *-i-* (and hence $[\mathrm{t}^{s}]$ or $[\mathrm{t}^{\check{s}}]$, i.e. *ts-* and *ch-*) for "fingered." The vocalization of the *kuchi-*

jamisen forms, where it is significant, appears to reflect the *a, i, u, e, o* order of the phonological *kana* tables, but counting from third string to first, for the following "Ablaut" patterns:

Third string	*e*	*i*	*i*
Second string	*o*	*u*	*u*
First string	*o*	*u*	*o*

The form for "double stops" has what is phonologically a double initial, *shan* /syan/.

The Japanese fondness for special language probably finds its most striking demonstration in the extremely rich repertory of forms incorporating various kinds of impressionistic sound symbolism. These are of many types. Some are simple onomatopoeia and appear to imitate certain sounds of nature. The original association with non-linguistic sounds for most of them, however, is now obscure, and they can only be called examples of sound symbolism. In the language they enter into several different derivation patterns, which we will not attempt to sketch here. Typically they are nouns appearing before the particle *to* "in such a way as . . . ," or with the verb *su-ru* "do"; often they are used as adverbs, and often they are reduplicated. They usually describe states, conditions, or impressions, and since English is relatively poor in similar words they sometimes seem in translation to be somewhat vague. This is a misleading impression due solely to the inadequacies of English translation; in Japanese each of these forms has, in context, a very specific and clearly definable meaning.

A few examples follow, omitting information on their derivation and on their use with *suru*, and also omitting related forms (such as *hakkiri* "clearly" going with *hakihaki* "briskly," for example); it will be noted that a considerable proportion of these forms begin with *p-*, probably followed in frequency by forms in *k-* and *g-*:

Pokapoka "warmly," *poroporo* "(cry) copiously," *potapota* "drop by drop," *punpun* "(smell) strongly"; *pyū* "whizzing"; *kosokoso* "sneakingly," *guzuguzu* "tardily"; *kitto* "surely," *dotto* "suddenly," *potto* "with a blush," *sotto* "gently," *zutto* "directly," *hatto* "with a start," *ponto* "generously" (from these latter forms, of course, it is possible to isolate *-to*); *pokkuri* "suddenly," *yukkuri* "leisurely," *sokkuri* "entirely, exactly," *kitchiri* "punctually," *kossori* "stealthily," *gakkari* "disappointedly," *honnori* "slightly," *hakkiri* "clearly," *ussuri* "lightly," *botari* "with a flop," *pitari* "closely," *pittari* "exactly" (these similarly involving *-ri*); *patan* "with a bang," *pokan* "absent-minded-ly"; *dondon* "hand-over-fist, rapidly," *guigui* "vigorously," *kirakira* "glitteringly," *gatagata*, or *garagara* "clatteringly," *piripiri* "smartingly," *gobogobo* "gurglingly," *hatahata*, or *harahara* "flutteringly," *honobono* "dimly," *sarasara* "gurglingly," and *gamigami* "a shrew, a scold."

A variety of interesting bird names have their origin in imitatives reproducing the cries of the birds named. Several of these combine an onomatopoetic morpheme with *-su*, generally called a bound morpheme forming bird names but perhaps to be related to *su-ru* "do." The comparatively wide variation in some of the older forms for these words point up their imitative origin. Thus, Old Japanese has both *uguFisu* and *ukuFisu* for modern *uguisu* "warbler." Modern *hototogisu* is ornithologically "cuckoo" but in Japanese culture, especially in classical poetry, it is more closely equivalent to "nightingale"; the texts have *Fotötögisu* and *Fododokïsu* for earlier forms. Modern *kiji* "pheasant" has a complex history; the Old Japanese texts have both *kigisi* and *kïkïsu;* the former of these two appears to have developed along the following lines, *kigisi* > *kiŋsi* > *kiŋzi* > *ki*^{n}*zi* > *kizi* > *kiji*, and these changes have somewhat obscured its imitative origins. And, as in so many languages, the strident-voiced *karasu* "crow" still gives an onomatopoetic imitation of the bird's cry which has survived virtually unchanged from Old Japanese, where the form is the same.

Interesting examples of relatively pure onomatopoeia are also to be found in the Japanese-language versions of the cries of various animals and insects. These are Japanese "words" in the sense that they represent arbitrary but set associations of particular phoneme sequences with different animals and insects. Even though they were originally (i.e., etymologically) no doubt inspired by the actual noises themselves, they can neither be made up at will nor accurately associated with their proper animal without a prior knowledge of the Japanese language, of which they are now a part.

The Japanese summer and autumn are particularly distinguished by the appearance of large numbers of noise-making insects, though the rise of large urban centers is tending to reduce their numbers each year. Traditionally the Japanese have been fond of these singing insects, and they often keep particularly lively specimens close at hand in small cages during the fine days of late summer and autumn. In the early fall Japanese schoolchildren with their insect nets and other bug-catching paraphernalia are a common sight as they scurry about the city parks or other remaining open spaces, adding to the insect collections which are part of their summer-vacation homework assignments.

With this prevalence and tolerance of insect life goes a well-developed vocabulary of insect cries. Among the many varieties of crickets common in Japan, for example, that which is called the *matsu mushi* (*matsu* "pine tree," *mushi* "insect") goes *chinchirorin;* that which is called the *suzu mushi* goes *riinrin* (perhaps suggested by its name, "little bell bug," in which the *suzu* element is written with the Chinese character for Sino-Japanese *rin* "little bell"); the cricket called *kōrogi* goes *ririririri,* and still another particularly noisy variety, the *kutsuwa mushi,* goes *gachagacha.* Among the grasshoppers, the *umaoi* goes *suitcho,* and the *kirigirisu* (whose name itself, like the *korogi* above, is a good example of sound symbolism; on the *-su* element in which it ends, cf. the bird names in *-su* above) goes *chongiisu.* In Heian texts a notably vociferous kind of cricket is called the *kutsukutsu bōshi,* "the fellow [who goes] *kutsukutsu*"; the same insect later appears under a metathesized version of the same term as the *tsukutsuku bōshi.* The *tororo* "grated yam" is a dish so named from the consistency of the substance; compare *torotoro ni nar-u* "be reduced to a pulp," and *torori to shita* "melting, flowing (of a viscous liquid)." The popular motion pictures on semi-historical themes which are the Japanese equivalent of the West's "westerns" are called *chanbara,* an imitative of the sound of their sword-rattling fights and duels. The postwar years have seen (and heard) the apparently enduring popularity of the pinball game called *pachinko,* though this term can at best summon up only a faint echo of the ear- and nerve-shattering clang, rattle, and crash which the *pachinko* parlors contribute to the urban din.

Taboo avoidance of certain lexical items for religious or other technical reasons and the substitution of euphemisms for them are common phenomena in many languages of the world, and Japanese is no exception. The Buddhist clergy in Japan, for example, have always had a considerable specialized vocabulary for avoiding direct verbal reference to foods and other things forbidden to them by their monastic vows. These have differed greatly depending on the period and the particular Buddhist sect involved, and today much of the earlier system has fallen into neglect.

One such system of taboo references and substitutions which can still be quoted in fairly complete detail comes not from Buddhism but from the native Shintō cult, and is still rigidly enforced within the precincts of the Grand Shrine of Ise, a Shintō establishment of great antiquity and importance. Here during most of Japanese history the chief religious officer was an imperial princess selected by lot and sent to Ise, where she remained as a kind of royal hostage dedicated to religion until she was freed from her duties by the death or the abdication of the emperor to whom she was related.

The Ise taboo system as reported today operates in two main categories: words avoided because they have special reference to Buddhism, and words referring to death and disease which are generally subjects for taboo avoidance in all Shintō observances. The first category reflects the fact that although Buddhism and Shintō have traditionally coexisted quietly together in Japan, there have nevertheless been at times fairly marked disputes between them. It also reminds us that the Shintō cult has adopted many Buddhist ritual objects and observances in the course of history. For practical purposes it was often necessary to have some alternate way to refer to these items, which were, however, still recognized as the implements of a different if not actually hostile system and hence were taboo for direct reference. The increasing Buddhist preoccupation with funerals and with the progress of the soul after death no doubt also played its part in this, because of the Shintō taboo on any mention of death or its causes.

The terms considered taboo at Ise and the words substituted for them follow:

Taboo Term	Substitute
First category:	
hotoke "the Buddha; someone deceased"	*nakago* "the child in the middle"
kyō "(Buddhist) sūtra"	*somegami* "dyed paper"
tō "a stūpa"	*araragi* "a yew tree"
tera "Buddhist temple"	*kawarabuki* "(a building) roofed with tiles"
sō "Buddhist monk"	*kaminaga* "the long-haired one"
ama "Buddhist nun"	*mekaminaga* "the female long-haired one"
toki "Buddhist fast or abstinence rules"	*katazonae* "a single food tray"
Second category:	
shin-u "die"	*naor-u* "recover"
yamai "disease"	*yasumi* "rest, vacation"
nak-u "cry"	*shiotar-u* "drip down salt"
chi "blood"	*ase* "sweat"
utsu /ut-u/ "decapitate"	*nazu* /nad-u/ "stroke, pat"
ana "hole (as for a grave)"	*sono* "garden"
haka "grave"	*tsuchikure* "lump of earth"

Some of these, particularly in the second category, can only be described as pure Forest Lawn American; others are more interesting examples of fairly complicated varieties of taboo substitution. With *kaminaga,* for example, we must keep in mind that the Buddhist clergy, both men and women, shave their heads, while *kawarabuki* focuses on the early distinction between Shintō structures with roofs of thatch or wooden shingles, and Buddhist temples with their characteristic roofs of continental ceramic tiles.

On the phonetic level alone there are also many varieties of special language in Japanese, ranging all the way from the elaborate diction of the traditional Nō and Kabuki stages to a variety of nasalization which is used as vocal qualifier both on the stage and in certain kinds of public announcements. In general terms many of these phenomena can be grouped together under an element of vocal qualification similar to that which in other languages has been called "unctuousness"; it consists mainly of making the sounds more hollow through backing and rounding, with accompanying velarization or pharyngealization. This "unctuousness" is a technique of special discourse which can be observed in the announcements of bus girls, elevator operators, and public-address system announcers. At the other end of the cultural and aesthetic scale, it occurs in the chanting of the narrators (*gidayū*) who accompany Bunraku puppet performances, or sometimes in the dialogue of actors in the historical pieces (*jidai mono*) of the Kabuki repertory.

Probably nowhere, however, is the evidence for such "notable" utterances more striking than in traditional Japanese literature, particularly in some of the forms and devices of its poetry. With a few unimportant exceptions Japanese poetry has always been composed within comparatively narrow confines of space—the 31-syllable *tanka,* and its even shorter development as the 17-syllable *haiku* are typical. Even (or perhaps one should say, especially) within these extremely limited boundaries extraordinary attention has been paid to ways of using words which lift them above their literal meaning in ordinary discourse, and shape them into a poetic language of great sophistication and complexity.

These techniques have been described by Japanese literary historians and critics under several different categories. While any comprehensive treatment would involve a major detour into literary criticism, it is nevertheless possible to summarize some of the most important of these devices which make use of language for what have well been called "decorative" purposes.

Any discussion of the special techniques of decorative language as they appear in Japanese literature generally begins with the *makura kotoba* or "pillow-word," perhaps so called because it was thought of as supporting the word which it introduced or modified as a pillow (*makura*) supports the head. The *makura kotoba* are most often but not necessarily of five syllables, and are set phrases used to modify certain fixed words; they have been well described as "stylized semi-imagist epithet(s) . . . used partly for sound, partly for rhetorical amplification." Originally most of them were probably simply descriptive terms which gradually became more and more attenuated in meaning. Today the reference works record and catalogue for convenient use some 1200 such expressions. The technique is as old as Japanese poetry itself, though it seems to have been refined and developed as a literary technique particularly by the poet Kakinomoto Hitomaro (fl. ca. 680–700).

Old Japanese *makura kotoba* which may be cited from the *Man'yōshū* include, among the many which appear there, such forms as *yasumisisi* "he who knows, or governs the eight, i.e., all corners of the land, or, ruling in peace," going with *öFokimi* "sovereign lord"; *murakimo* "the clustered livers, i.e., the viscera," going with *kökörö* "heart (the chief internal organ)"; *kusamakura* "a pillow of grass, or, wild plants," going with *tabi* "journey"; *Fuyukömori* "winter-bound" going with *Faru* "spring"; *momosikï* "well-fortified" going with *öFomiyadökörö* "palace"; *momotarazu* "less than 100," going with virtually any word involving a number less than 100, or with words written with Chinese characters involving such numbers; and *utusemi* < *utusömi* < *utusiömi* "a person of this life, (later understood as) transient, of this phenomenal body," going with *inoti* "life." This last example shows the semantic development of a *makura kotoba* on its way to the complete attenuation of its literal meaning when used as a poetic epithet, an extremely complex route which is often difficult to trace, since it involves both phonetic and semantic shifts of considerable dimensions.

"Pillow-words" of four syllables are made to fit into the usual five-syllable context of Japanese poetry by the addition of *no*, Old Japanese *nö*, here to be understood as an allomorph of the copula, thus *momosikï no / öFomiyadökörö* "the palace, [which is] well-fortified." When, as in the case of *utusemi* < *utusiömi*, an original five-syllable "pillow-word" became a four-syllable one in the course of its semantic attenuation, this same *nö* was conveniently available to remedy the metric deficiency which such change caused. Or when as in *Man'yōshū* 17 we find what would normally be a five-syllable line filled with what appears to be a four-syllable *makura kotoba* but without the *nö*, and when that *makura kotoba* is *umasakë* "delicious rice-wine," ending in Old Japanese *-ë*, we are tempted to posit a bi-syllabic pronunciation for the Series B or *otsu* vowels of Old Japanese, at least at the time of the composition of this particular poem. (Here *umasakë* goes with Miwa, the name of a mountain, because of the homophonous Old Japanese form *miwa* "rice wine for offering to the deities.")

An extended form of the *makura kotoba* is the *jo* or "introduction," a *makura kotoba* which may extend to three or even four of the five lines allowed in a *waka*. The principles are the same as with the *makura kotoba* but because of their more extensive length the *jo* present greater problems both in their effective use by the writer and in their appreciation by the reader. The *jo* is basically a technique which provides a linguistic anticipation of something coming later. It may be joined to this later element, its "statement," by various techniques —by word play, similarity of sound, or by an implied metaphorical relationship. The following poem, *Man'yōshū* 2440, shows the use of a *jo* which begins the poem and extends in the fourth line up to the word *kakurete* "hidden," which is the first word of the statement proper:

Ōmi no umi	As on the sea of Ōmi
oki kogu fune ni	a ship rows out to the deep,
ikari oroshi	drops its anchor,
kakurete kimi ga	and is thus so I } hidden,
koto matsu ware zo.	await some word from you.

The second main variety of Japanese decorative language is *engo* or "associated words." The term is a Chinese loanword, literally "*karma* words," and the device is essentially a semantic one utilizing associations between different words whose connection is to be found not within the linguistic materials proper but rather in similarities among the items of the real world to which they refer. Elements employed as *engo* hence may be used in one section of a poem or other literary composition in a specific meaning and at the same time carry with them overtones for or from another part of the same work because of their association with different words or phrases. In a celebrated poem by Taira Motonari (d. 908) on the departure of an ambassador to China, for example, three different words, *tachi* "rise, or leave," *harenu* "does not clear," and *wataran* "will cross, or spread" are all used as *engo* for *akigiri* "autumn mists." In a simple example of the same device from Chikamatsu, *momi no kosode ni mi spread*" are all used as *engo* for *akigiri* "autumn mists." In a simple example of the same device from Chikamatsu, *momi no kosode ni mi o kogasu,* "[to pawn] the red silk padded robe made her being burn,' *kogas-u* "burn" is a word associated with *momi* "red silk" because of the semantic association of "red" and "burn."

Closely related to the *engo* is the *-zukushi,* a series, which can be fairly long, of *engo* all of which are associated with a single word. The term itself is a deverbal with voiced initial from *tsukus-u* "to exhaust, use up," and the *engo* are named for their referrent plus *-zukushi,* thus *hashizukushi* "an exhaustive list of *engo* referring to bridges, or an exhaustive list of bridge names," *kamizukushi* "a list of various kinds of paper," etc.

Numbers are often employed as associated words, particularly when they make it possible to involve place names containing numerals in the device. As a matter of fact, similar involvements of place and personal names are extremely common in all these literary applications of special discourse devices.

The third important type of the decorative use of special discourse in Japanese is the *kake kotoba* or "pivot word." This is a syntactic conceit based on an extended variety of word play in which a word or phrase in whole or in part has at least two quite distinct meanings in the single place in which it is used. One of these meanings connects it with the preceding clause or phrase while the other has immediate reference to succeeding materials. In this way it serves as a link between two sections of the composition, which overlap at the point where this single word or phrase with its two meanings occurs; hence its designation as a "pivot." "The first phrase . . . has no grammatically logical ending, nor the following one a logical beginning, and this gives a certain ambiguity which pleases the Japanese. . . . Chikamatsu often uses pivot words in series, so that the entire sentence is twisting and turning."

The "pivot word" device makes use of at least two major types of word play. One involves morphemes that are totally without etymological or semantic relation to each other, such as *matsu* "wait" and *matsu* "pine tree." (Of course, once such a literary device has been made part of the cultural tradition over a period of time the two forms are then often "felt" to be related to each other, but this is a secondary development arising directly from the device under discussion, and originally played no part in it.) In the other variety a single morpheme with quite clearly differentiated meanings in different contexts is used so as to bring out each of these different semantic values, thus *iro* as both "color, complexion" and as "sexuality, sensuality." In most cases the two or more meanings which are capitalized upon in this variety of the "pivot word" are historically semantic expansions or transfers of each other. In still another variety, best treated as a sub-class of the second, there is little to choose between analysis as a case of "one morpheme, two meanings" or as a case of two unrelated morphemes. Here it is precisely in the tenuousness of the relationship that the chief attraction of the device as a variety of special discourse is found. An example would be *fumi* as a "pivot word" in the senses of "handwriting, or, letter" and "tracks, traces," as if both were deverbals from *fum-u* "tread upon," an etymology which for *fumi* "writing" is as questionable now as it was in the time of the "mother of Michitsuna" who employs it as a pivot in her *Kagerō nikki.*

In a typical example of the "pivot word" from a poem by Ki Tsurayuki (884–946), the line *ko no me mo haru no* has *haru* both as *har-u* "swell (as buds)" and as *haru* "spring (season)"; thus it "means" both ". . . the treebuds swell" and "in spring. . . ." In another example from Chikamatsu the element *ki* is used as part of the inflection of the verb *ku-ru* "comes" and at the same time as the first part of the proper name Kiinokuniya: *uchi kara hashiriki / no kuniya no sugi* "from her establishment comes / Ki[i]nokuniya's Sugi." Chikamatsu has examples of phrases as long as 13 or 14 syllables which serve as pivots in their entirety, and some of these are even employed not only on two but on three different semantic levels simultaneously.

The phonetic structure of Japanese in all periods has certainly encouraged the employment of alliteration as a literary device; as an example the following from the language of Chikamatsu is typical: *tera tera no kane no koe kōkō. kō shite . . .* , "the tones of the bells of the temples [sound] *kōkō*. Like this. . . ." In a more elaborate passage, Chikamatsu engages in large-scale repetition of the syllable *ko: kado okuri sae / soko soko ni / shin shikii mo kosu ya / kosanu uchi / kotatsu ni Jihei / mata korori / kaburu futon no / kōshijima*, "Jihei sees them to the door, and hardly have they crossed the threshold when he throws himself down by the covered brazier and pulls the grill-striped quilt up over his head." Here *kōshijima* "grill-striped" is an associated word used for its connection with the licensed quarter of Osaka, the setting of this play, where the houses had large surfaces of grillwork to cover their windows facing the street.

Chikamatsu also often engages in extremely intricate patterns of assonance, where the repetition of a single or double syllable in consecutive lines produces a varied rhythm; thus, *itonamu waza mo / kami mise ni / kamiya Jihei to / na o tsukete / chihayaburu hodo / kai ni kuru / kami wa shōjiki / shōbai wa / tokoro gara nari / shinise nari*, "the business which is carried on is a paper store, under the name of Jihei the paper merchant, and it is [conducted] vigorously so that customers [practically] rain on it; the paper is genuine; the business [profits by] its location, and because it is a long-established shop." Here assonance is to be observed in the repetition of *kami*, in *-buru* and *kai* (*ni*) *kuru*, *shō* (*jiki*) and *shō* (*bai*), and in the repetition of *nari*. Here too *kami* is a pivot word, both as "paper" and as its homophone "deity," which explains the introduction of the "pillow-word" *chihayaburu*. This presumably was once an epithet of deities, with something of the meaning of "all-powerful," but its sense as a *makura kotoba* was already considerably attenuated by the time of the *Kokinshū*. This, plus the use of *kami* as a "pivot word" for "deity" and "paper" (both homophonous as *kami*, though historically and etymologically two totally unrelated morphemes), explains its introduction in this passage from Chikamatsu. Here it is used on these levels, and in addition, since it contains (with initial voicing) the element *furu*, as an associated word for *fur-u* "fall, rain." The phrase *kami wa shōjiki* too involves several levels, both "the paper is honest" and "the gods [reside in] honest [heads]."

Another specimen of assonance to be quoted from Chikamatsu involves the syllable *ya*, both alone and in *cha*, phonemically /tya/: *chaya no chagama mo / yo hitotoki / yasumu wa yatsu so / nanatsu to no*, "even the teakettle of a house rests for a two-hour period at night between two and four."

In the work of authors such as Chikamatsu, onomatopoeia and sound symbolism are not isolated devices but are further involved with other examples of the special kinds of language. In one passage he maintains close parallelism in two pairs of lines of seven and five syllables, matching step-by-step an onomatopoetic word, a verb, and two nouns:

kuru-kuru taguru / *kaze no yo wa* /
seki-seki mawaru / *hi yōjin* /

"[the night patrolman] coughing and coughing as (he hurries) on his rounds with a cold on this (windy) night, as he cautions 'be careful of fire!' " Here *kuru* is both *ku-ru* "come" and an onomatopoetic representation of the sound of coughing; *kaze* is both "a cold" and "wind," and *seki* both "hurrying" and "coughing." There is also assonance in the opening line, since the opening *kuru* is repeated, with initial voicing, in *taguru*.

An amazingly thoroughgoing example of assonance combined with a variety of word play is the following poem, *Man'yōshū* 27:

yöki Fitö nö	Look well at
yösi tö yöku mite	Yoshino, which the good (yöki) men [of old]
yösi tö iFisi	Saw well (yöku) that it was good (yösi)
yösinö yöku miyö	And called it good (yösi)—
yöki Fitö yöku mi	Oh good man, look well!

Considering the number of times that the poet here has been able to work various forms of *yö-* "be good" into this poem in praise of Mt. Yoshino ("Good Field"), not to mention his triumphs with *i*-assonance, he may perhaps be forgiven for the totally vacuous content of the text which resulted from these labors.

Combinations of sound symbolism and onomatopoeia with assonance show the involved nature of many of the literary utilizations of these types of special language, even within relatively short passages; thus, again from Chikamatsu, *hagiri kirikiri* "[he] gnashed his teeth [with the sound] *kiri-kiri*," and *kuroro kottori to*, "[he fastens] the cross-bar [with the noise] *kottori*."

For an example of how decorative language can be woven into memorable prose it is difficult to find a better passage than the following short description of the "retired Emperor" Kenreimon-in's hut, from the *Ōhara gokō* chapter of the *Heike monogatari:*

ushiro wa yama, mae wa nobe, isasa ozasa ni kaze sawagi, yo ni tatanu mi no narai to te, uki fushi shigeki takebashira, miyako no kata no kotozute wa, madō ni yueru masegaki ya, wazuka ni kototou mono to te wa, mine ni kozutau saru no koe, shizu ga tsumagi no ono no oto, korera ga otozure narade wa, masaki no kazura aotsuzura, kuru hito mare naru tokoro nari.

Behind it were the mountains, before it the fields, the wind rustled in the small bamboos; as is the way with people who have no traffic with the world, painful happenings were numerous as the joints in the bamboo pillars; word from the direction of the capital came far apart as the interstices of the roughly woven bamboo fence; the rare visitors were the voices of the monkeys swinging from tree to tree on the peak and the sound of the axe of the woodsman cutting firewood; except for these calls, there was only the silence of spindle-tree and moonseed vines; this was a place people rarely visited.

The English version given is Donald Keene's; it is not an exactly literal translation but what he calls "an approximation" of the sense of the passage, but it succeeds in being faithful both to the original and also to the requirements of English style and syntax—no mean feat in dealing with language of this type.

Here the phrase *isasa ozasa* begins the passage's employment of "notable" language; *ozasa* is "small bamboo, bamboo grass," and *isasa* is a sound-symbolic form used both to imitate the sound of the wind as it rustles in the vegetation and to duplicate the rhythm and sound of the following word *ozasa*. Apart from this *isasa* has, as the Japanese dictionaries put it, "no meaning." *Ukifushi* involves *fushi* as a "pivot word" for "painful happenings" and "joints in the bamboo"; the reader must assume that Kenreimon-in's hut had bamboo pillars, filling out the phrase, but the text does not say so specifically. In the following clause the "pivot" is *madō* < *madowo*, "far" both of "news from the capital" and "interstices in a bamboo fence." Next the passage engages in an elaborate series of "pivots" built upon *oto* "sound," in *kototou* "ask things," also used for "to visit," and *otozure*, also "visit," and then mention of the voice of the monkeys and the sound of the axe, this last actually with *oto* "sound." Finally, the two kinds of vines, *masaki no kazura* and *aotsuzura*, are both used as a *jo* for the verb *ku-ru* "come," and in addition "associated" with the homonymous verb *kur-u* "reel in," as one would do with a rope or (the "association" in this passage) a long, tendrilous vine.

Poetry in Japan has generally contented itself with small-scale forms, and one is sometimes asked why the culture did not encourage the development of longer poetic genres; part of the answer is to be found in long, rhythmic-prose texts of this variety. Except for the first and last lines, which are of six syllables each, this entire passage consists of alternating seven- and five-syllable lines (5: *mae wa nobe*, 7: *isasa ozasa ni*, 5: *kaze sawagi*, 7: *yo ni tatanu mi no*, [etc.]). The caesura-like division at the end of each line corresponds to syntactic divisions except near the end of the passage, where two of these divisions interrupt the syntax (7: *korera ga otozu-* 5: *-re, narade wa*, and 7: *kuru hito mare na-*). This calculated skewing of caesura and syntax brings to the climax of the description a liveliness and a sense of acceleration which throw into prominence the total internal structure of the passage. Phonologically we note that *owo* > *ō* consists of two syllables, as does the sequence *au*, but the sequence *ou* must be counted as a single short *o*.

Above all, it is the literature of the Nō drama which provides the most remarkable examples of the use of these varieties of special language; a typical passage is the following, from the play *Hanjo* by Seami (1363–1444), again in Professor Keene's masterful English rendering:

Yoshida:	konata ni mo	I too have a keepsake
	wasuregatami no	I cannot forget
	koto no ha wo	the words we spoke
	iwade no mori no	but if, like unseen azaleas
	shita tsutsuji	in the silent wood of Iwade
	iro ni idezu wa	you show nothing in your face
	sore zo to mo	how am I to understand?
	mite koso shirame	seeing it, I shall know
	kono ōgi	your fan.

Hanjo:	mite wa sate	Seeing it?
	nani no tame zo to	what use will that be
	yūgure no	do you say?
	tsuki wo idaseru	importuning me so
	ōgi no e no	for a fan with a painted picture
	kaku bakari	of the twilight moon?
	to itamō wa	what can
	nani no tame	your purpose
	naruran	be?

This passage, one of "typical complexity" for the Nō, contains the following four "pivots": 1) *wasuregatami* "a keepsake" and "difficult to forget"; 2) *iwade,* a place name and "not speaking"; 3) *yū* "evening" and "speak"; and 4) *kaku* "thus" and "write." In addition, *iwade no mori no shita tsutsuji* "the unseen azaleas in the wood of Iwade" is a *jo* to the following *iro ni idezu* "show nothing in your face," and at the same time *iwade no mori,* both "the wood of Iwade" and "the silent wood," is a "pillow-word" usually involving, as here, a pivot with "not speaking."

Chapter 8

Grammar and Syntax

So far we have seen some of the ways in which the individual units, the words, which make up the Japanese language have come to be what they are. But language is more than simply "words, words, words." A malicious critic once pictured the late Gertrude Stein as composing one of her characteristic essays by simply selecting at random from her sewing basket pieces of cardboard upon which various words had been written. But even her freewheeling prose, of course, could not have been composed in this fashion, and more normal discourse in any language known to us has far more complicated "rules" as to what combinations do and do not occur than such a hit-and-miss process of selection could allow for. Language consists of individual units put together in some arbitrary but fixed order. These are the units which we commonly call words. It is chiefly in the order of their occurrence that we discern that some words in every language are different from other words in that language. The "rules" governing the ways in which words can be and are put together in a language in order to produce intelligible discourse are what we generally call grammar. Since it is from the ways in which the individual elements of language combine in connected discourse that these rules are evolved, by the same token these rules provide methods for classifying these many elements into a relatively small number of groups or sets of forms. In other words, language has structure; this structure can be described by linguistic analysis; and this same structure, the "grammar" of the language, can be used to sort out the forms comprising the language into what are often called parts of speech or word classes.

In identifying certain of the forms cited thus far it has already been necessary to mention some of the word classes of Japanese. Here we shall try to give a cursory view of the principal structural features of modern Japanese, many of which are also applicable to earlier stages of the language. There are, of course, hundreds of elements of detail which will necessarily be passed over.

As we might expect, the Japanese have been no mean students of the structure of their own language. The principal pre-modern work on Japanese grammar was accomplished by Fujitani Nariakira (1738–1779), a Kyoto scholar who was especially concerned, among other subjects, with Japanese poetry. He was the first Japanese to make a serious attempt to classify the forms of the language according to their grammatical function. Since he necessarily did his work in isolation from the grammatical traditions of both India and western Europe, the bold originality of his analysis is not surprising.

Fujitani arranged the forms of Japanese into four major categories, which still merit serious attention. To these he applied the following terms: 1) *na* "name"; 2) *yosoi* "decoration"; 3) *kazashi* "hairpin"; 4) *ayui* "binding cord." The first of these was the only one for which the Japanese language of his time had a ready-made term, the word *na* meaning "name." This he applied to what we now call nouns, a large category encompassing all uninflected free forms. The other three categories he was forced to name with words which he more or less made up for the occasion. Operating in isolation from any other major grammatical tradition he hit upon the interesting expedient of designating them with words for articles of dress. His second category, *yosoi,* contained all the inflected forms of the language, those which today would be considered verbs, adjectives, and the copula. His third category, *kazashi,* consisted of bound forms used in syntax preceding other forms of either his first or his second category. In the same way his last category embraced all those bound forms which follow the forms to which they have reference.

In the names he devised for these last two categories Fujitani clearly wished to emphasize the "binding" function of these forms, just as the hairpin holds together (and at the same time decorates, i.e., modifies) the coiffure, or as the "binding cord" in classical Japanese costume was used to tie together the lower portion of a man's ceremonial dress about his knees and lower limbs. Not only are Fujitani's grammatical terms a pleasant surprise in an area where new ideas are few, but his linguistic analysis itself is also extremely significant, all the more so because it was evolved without reference to any outside grammatical tradition.

Two examples from the *Ayuishō,* one of Fujitani's grammatical works the manuscript for which was completed in 1773, will give an idea of his method of description and classification. The first deals with the grammatical particle *yori,* in *Ayuishō* 3.13:

"This is a word which fixes objects in a location and then expresses departure from there. Three varieties: 1. 'the departing *yori.*' For example, when speaking of going from east to west, just as in the spoken language. Also equals *kara. yori* and *kara* are originally the same word; . . . in early ages *yori* is rare and *kara* frequent. *yori* also appears as *yu.* . . . 2. 'the placing *yori.*' In the spoken language, *yori hoka ni.* This gradually enters poetry, where its sense is the same as in the spoken language. . . . 3. 'the exceeding *yori.*' For example, *sakura yori ume wa hayaku saku* 'the prunus blooms earlier than the flowering cherry'; *ume yori sakura wa uruwashi* 'the flowering cherry is lovelier than the prunus'; etc. Also, *mizu yori samuku* 'colder than cold water'; *hi yori atsushi* 'hotter than fire,' etc., are examples of this. Anciently these appeared as *yori mazu, yori saki, yori ato, yori masarite, yori keni,* etc.; these then also often appeared in poetry simply as *yori wa, yori mo,* which still later gradually became simply *yori.* . . ." This account of *yori,* like each article in this section of the *Ayuishō,* is preceded by a statement of its syntactic occurrence in terms of his description of the language, but since this involves several layers of his system it has not been translated here.

Another example from *Ayuishō* 4.6 describes the element *-ku* in Fujitani's grammar, which subsumes *-ki*, *-keri*, *-kemu*, *-ku*, and *-kuru:* "This is a word which definitely fixes and expresses something (*koto*) which is past. However, it is exclusively used about people; even though it is sometimes used in soliloquy, it is only used in poetry when the sense is such that one is asking of one's self and replying to one's self. In the spoken language, *-ta goto zo*, *-ta goto de atta*, *-ta koto de gozāru*, etc."

These two passages show several of the important characteristics of Fujitani's work; his primary concern was with the forms and structure of the language of Japanese poetry, which however he "explained" in terms of the spoken language of his day, of which his glosses incidentally preserve many valuable examples (and which, as above, he sometimes segmented in a somewhat surprising fashion). His terms for grammatical functions generally incorporate the item being defined; thus, with *yori* the three classifications which have been translated above as "the departing *yori*," "the placing *yori*," and "the exceeding *yori*," are *izuru yori*, *oku yori*, and *masaru yori*. And he was not without a sense of the historical development of language which at times sounds surprisingly modern.

Another pioneer in Japanese grammatical study was the priest Gimon (1786–1843). He was also a specialist in historical phonology, but in his study of grammar he directed most of his attention to subdividing the inflected forms of Fujitani's second class. As we shall see below, the inflected forms of Japanese are extremely complicated, and consist of several major form classes which overlap to a certain extent. Hence a good deal of care is needed in their description.

This completely indigenous grammatical tradition begun by Fujitani, Gimon, and others, was unfortunately nipped in the bud by the introduction of Western learning at the end of the Tokugawa period. Had they proceeded without this largely baneful influence from the outside the Japanese would without doubt have evolved a science of grammatical description of considerable significance in the history of world scholarship. Unfortunately, however, during the last years of the Tokugawa period, with the rise of the study of Dutch and then English, people turned to foreign books not only for advanced knowledge of medicine and astronomy but also for what they thought were advanced views on grammar. We now know that here they were sadly misled. The general view of the nature of language and the level of the study of grammar in the West was then at an all-time low. The net result has been that almost all that the Japanese acquired at this period still has to be unlearned. A great deal of antiquated and unscientific Western grammatical thought was quickly carried over into the terminology and methodology of the study of Japanese grammar, where it still survives in the Japanese school tradition. The scientific and descriptive approach of pioneer scholars like Fujitani was cast aside in favor of a wholesale and usually disastrous attempt to identify within Japanese the categories of Indo-European grammar, particularly those of Dutch and English. Lacking any clear methodological basis for their work in this field, and going about it with the same uncritical enthusiasm with which their countrymen were imitating other aspects of Western culture, Japanese would-be grammarians soon had succeeded in making their description of Japanese almost indistinguishable from then-current descriptions of English. Since the two languages are very different in structure the results were of course calamitous.

Both the variety of grammar taught today in the Japanese school system and the approach of most Japanese specialists to the analysis of their language are to a large extent still inheritances from this period of indiscriminate borrowing. It was not until the 1940's, when foreign linguists began work on the description of Japanese, that the analysis of Japanese grammar in the tradition of Fujitani and Gimon was begun again. But by that time the Japanese school tradition had become so entrenched that very few of the insights of these new studies have subsequently been able to enrich the native tradition.

In all fairness it must be said that the school tradition of Japanese grammar is not always quite as bad as its terminology seems at first glance to indicate. This terminology consists largely of early Meiji-period literal translations for English or Dutch grammatical terms, which were then quite indiscriminately applied to Japanese grammatical categories or relationships on the basis of their translated "equivalents." Thus, if a Japanese word could be translated by what was in English called an adjective, then the Japanese word itself was *ipso facto* an adjective and was so called. Needless to say, such analysis and terminology both led nowhere.

Subsequent generations of Japanese grammatical scholars have done a good deal to clear away the debris produced by this lack of discrimination, but they have generally hesitated to tamper with the terms themselves, which remain as a peculiar kind of tribute to the excesses of the earlier period. The most impressive aspect of Japanese school grammar is probably its virtually endless proliferation of terms for every conceivable shade of semantic differentiation; like the *Life of St. Neot*, it attempts to tell "all, and rather more than all, that is known" about the subject. In this, of course, it simply follows the tradition of the great English-language grammarians of the first part of this century. Thus, for the uses of the grammatical particle *no* a great variety of categories are established; but most of these deal in such fine semantic differentiations in areas where there is as yet no scientific way to operate that the result is a mass of largely incoherent detail. Thus in one system *no* is said to be at times attributive (*natsu no yoru* "summer's evening," *ume no hana* "plum blossom"), at times possessive (*ani no ie* "[my] elder brother's house"), and at times appositional (*Fuji no yama* "Mt. Fuji," *ani no Tarō* "[my] elder brother Tarō"). The appositional usages are further broken down into those in which both members are of comparable semantic value (*hana no miyako* "the capital [which is equal to, i.e., which is described by] flowers," *tsuyu no inochi* "human life [which is equivalent to] dew"), and an expanded appositional structure in the literary language in which the *no* follows a verb form (*ima komu no chigiri* "the vow that I will make now," *ware ya yukamu no izayoi* "the 16th night of the [lunar] month in which I will come"). This kind of differentiation may be of value for certain didactic purposes, but what it tells us of the structure of the language is another problem. We read on a delivery truck the following legend: *Nakamura no hamu* "Nakamura's Ham." Is this a case of the possessive *no* until we purchase some of it, and does this then shift to the appositional *no* once the boy has made his delivery? Or does the nature of the grammatical structure change only when we have paid our monthly bill, and the possession of *Nakamura no hamu* legally shifts to us? Another treatment of *no* establishes 21 different categories of use solely for those cases where *no* appears between nouns or nominal elements, even apart from its other uses!

What these traditional descriptions do not recognize is at least as important as what they do. For example, they generally make no provision for the difference between the referent particle *no* (*jitsugyōka no tomodachi* "the businessman's friend") and the homophonous but totally different morpheme *no*$_2$ which is actually an alternant of the copula (*jitsugyōka no tomodachi* "the friend who is a businessman"); it is of course under this latter form that some of the examples immediately above must be classified. Equally foreign to the usual grammatical systems is a third homophonous but again totally distinct no_3 which is a noun: *shinbun o kai ni itta no wa dare desu ka* "who (is the one who) has gone to buy the newspaper?", or *ano kirei na musume to hanashite iru no wa kinō watakushi no uchi e asobi ni kita Yamaguchisan desu,* "the one who is talking to that pretty girl is Mr. Yamaguchi who came to visit me yesterday." (Here the *na* in *kirei na musume* is another variant of the copula, parallel to no_2, going with the copular noun *kirei* "pretty," on which see further below.)

At the same time, the Japanese grammatical tradition curiously enough lacks terms for identifying some of the most important features of its own grammar. Among the hundreds and hundreds of grammatical terms taught in the schools there is, almost unbelievably, no term which clearly identifies the copula as a distinct category of the language; yet the copula is one of the most distinctive features of Japanese, whether we are studying it as a foreign language or describing it as a system in its own terms. It is impossible to deal with more than a few lines of text in the language without coming across a copula form. The copula is one of the three classes of inflected forms in Japanese and is completely distinct among them; yet traditional Japanese grammar lumps it together with the many different kinds of "auxiliary verbs" and does not identify it in any way commensurate with its role in the structure of the language. In the same way the treatment of the adjective (*keiyōshi*) in traditional Japanese grammar is completely at the mercy of the inherited English grammatical description dating from the Meiji period and totally obscures the relationship of this form class to the Japanese verb.

Probably the most unsatisfactory part of the traditional Japanese system is its treatment of the noun, where attempts are made to identify "adverbs" (*fukushi*) and other subordinate form classes. The amount of intersection among the various form classes thus arrived at becomes so great as to make the entire description almost worthless. In the description of the morphology, too, as we shall see below, the traditional Japanese approach has limited itself to statements about syllables which can be written in the *kana* writing system, which allows no forms with syllable-final consonants other than the syllabic nasal. Hence it has been unable to arrive at a scientifically acceptable description of the structure of the language, which would require statements involving forms with final consonants.

The system of Japanese grammar presented in Japanese education today is by and large the work of Hashimoto Shinkichi (1882–1945).

His classification divides all the forms of the language into two main groups, free (*jiritsugo*) and bound (*fuzokugo*). The free forms are further divided into inflected (*katsuyōgo*) and non-inflected forms. The main classes of inflected forms in the system are: 1) verbs (*dōshi*); 2) adjectives (*keiyōshi*); and 3) verbal adjectives (*keiyōdōshi*). The terminology at once shows the indebtedness of the entire system to what we might term English translation-grammar. The non-inflected forms are further sub-divided into seven sub-classes as follows: 4) nouns (*meishi*); 5) demonstratives, or pronouns (*daimeishi*) (see below); 6) numbers (*sūshi*); 7) adverbs (*fukushi*); 8) attributives (*rentaishi*); 9) conjunctions (*setsuzokushi*); and 10) interjections (*kandōshi*).

In this sub-classification of the non-inflected forms the early inheritance from European translation-grammar is especially apparent. The fifth class term *daimeishi* (*dai* "stand for," *mei* "noun," *shi* "word") appears as a translation for Dutch *Voornaamwoord* "pronoun" around 1800, and is established as a grammatical term by 1814; but in the traditional system it includes a wide variety of forms, many of which if they were classified semantically would have to be called "demonstratives," and none of which stand in any relationship to nouns particular enough to merit for them the title "pronoun."

The seventh class, "adverbs," is one of the least satisfactory of all the traditional groups. Here are put together inflected forms from adjectives, verbal gerunds, reduplicated forms from other classes, and in fact a veritable museum of forms assembled from almost every other class in the entire grammar. The eighth class, "attributives," is an equally unsatisfactory category consisting largely of inflected verb forms isolated here almost entirely on the basis of their translation equivalents in European languages.

The bound forms are traditionally further classified into two form classes, 11) verbal suffixes (*jodōshi*) and 12) post-positions, or particles (*joshi*). The term *jodōshi* (*jo* "help," *dō* "action," *shi* "word") originated in a translation of English "auxiliary verb" and in the traditional system it is made up of all elements which can be added to verbs, including inflectional morphemes. The term *joshi* appears in 1856 translating Dutch *Hulpwerkwoord* "auxiliary verb," but now in Japanese grammar it is used for those enclitic non-inflected bound elements following other elements which we generally call grammatical particles.

The unnecessary complexity of the traditional system is best thrown into relief by contrasting it with the structure of the grammar as revealed by an investigation in purely descriptive terms. The language which emerges from such a treatment is no simpler nor any easier to summarize than the language revealed by any other analysis. Its facts remain the same and its many involved complications are not of an order which can be resolved merely by treatment according to one set of methods rather than the other. But the actual structural facts of the language are undeniably simpler and easier to grasp when presented descriptively, since they then appear in their own terms, without the added and unnecessary complications introduced by forced equivalences in terms of Indo-European grammatical categories. And quite apart from all these considerations, a descriptive treatment has validity simply because what it reveals *is* the structure of the language, and this is something which is important and worth knowing about purely in its own right, all other considerations aside.

What follows below has direct reference only to the modern standard spoken language; in order to extend it to any of the other varieties of Japanese, including earlier historical and written forms of the language, further statements would of course generally have to be made. However, even when thus limited it still gives an indication of the structure of Japanese which by and large has validity beyond the limits of the particular variety of the language upon which it is based.

In descriptive terms, apart from solely semantic criteria and without reference to translation correspondences in foreign languages, Japanese consists of the following five word classes or parts of speech:

I. THE VERB.

The Japanese verb is one of the three classes of inflected forms in the language. Each verb, like every other inflected form in Japanese, consists of a base and an ending. All Japanese verbs and other inflectional forms are impersonal, indicating simply the occurrence of an action or the existence of a state without reference to any specific actor. In the case of the verb the different endings allow for inflection for ten modal categories, as follows: 1) non-past indicative: *taberu* "eats," *matsu* "waits." 2) past indicative, indicating that an action took place or a state existed: *tabeta* "ate," *matta* "waited." 3) non-past presumptive, indicating a future action which depends on the speaker's decision to perform it: *tabeyō* "let's eat," *matō* "let's wait." 4) past presumptive, designating the probability that an action took place or a state existed: *tabetarō* "probably ate," *mattarō* "probably waited." 5) imperative, denoting a brusque or harsh command to perform an action: *tabe* "eat!" *matte* "wait!" 6) provisional, which makes a statement subject to the provision that an action takes place or that a state exists now or in the future: *tabereba* "provided that someone eats," *matereba* "provided that someone waits." 7) conditional, which is somewhat like the provisional but with the added restriction or condition that an action takes place or took place or that a state exists or existed; here the reference may be to the present, the future, or the past: *tabetara* "on condition that someone eats," *mattara* "on condition that someone waits." The meanings of the conditional and the provisional categories overlap to some extent and in many forms of the modern standard language the two are often interchangeable. 8) alternative, which indicates that an action is taking place among other actions or a state is existing among others: *tabetari* "eating as well as doing other things," *mattari* "waiting as well as doing other things." 9) infinitive, a form which indicates the taking place of an action or the existing of a state. The Japanese infinitive simply names or identifies an action or a state without reference to its occurrence or existence. Since the infinitive is used in various contexts with various specific meanings it is impossible to give a useful translation for the forms apart from such contexts: *tabe*, *machi*. 10) gerund. This resembles the infinitive in having specific and translatable meanings only in context; it indicates an action taking place or a state existing: *tabete*, *matte*.

Morphologically the Japanese verb is inflected according to two large categories, vowel verbs, whose bases end in *-e* or *-i* to which the endings for the inflectional categories are added directly, and consonant verbs, whose bases have two shapes. There are also a few irregular verbs, notably the verbs *ku-ru* "come," *su-ru* "do," and *ik-u* "go," which exhibit a few morphological irregularities as do also a small class of verbs especially employed in the system of levels of speech, such as *kudasa-ru* "give (down to a person of lower status)" and others.

Historically the Japanese verb has always been an inflected form used as the chief element of predication in an utterance, with different forms to indicate whether or not the utterance continues or stops with the form. At certain times in the history of the language it has also had different forms depending on the forms which follow it. These inflections have historically resulted from adding elements to the end of a stem; the affixation of these elements has in many instances been the occasion for phonetic changes in the stem itself, and the affixed elements themselves have often changed in the process of or after affixation to the stem. Japanese scholars often attempt to identify these affixed elements, especially in semantic terms, with other forms in the language, particularly with free forms. However, just as with similar theories of the historical evolution of the Indo-European nominal declensions, such identification is in most cases little better than speculation which can neither be proven nor disproven.

The earliest stages of the Japanese verbal inflection which can be traced by internal reconstruction, taking as a point of departure the earliest system seen in the eighth-century texts, indicate an original and basic contrast in each verb between two forms, one final or conclusive and one indefinite or continuative. The verb stems at this earliest traceable stage were two varieties, stems ending in a consonant and stems ending in a vowel, plus a subclass of the first, correlating in part with an ablaut difference in the affixed vowel, and in part with a slightly different structure of the base itself, as we shall see below. But since the most economical point of departure for investigating this simpler early system and its subsequent development is not modern spoken Japanese but rather the written language of classical Japanese, it is necessary first of all to consider briefly the classical Japanese verb.

The verbs of classical Japanese may be divided into eight classes according to the relations which can be observed between the stems of the verbs and their inflectional endings. Each verb form appearing in the texts is an inflected form, and hence can be analyzed into verb stem plus verb ending. These endings, each of which may further consist of one or more analyzable parts, are the same or similar for all the eight verb classes. The verb stem is that part which remains of an inflected verb form after the ending has been removed. Verbs of the same class have stems that appear in the same shape before a given ending. Descriptively the most striking thing about the classical Japanese verb is the fact that its stem has different allomorphs before different endings. The description of which allomorphs go with which endings (and the endings themselves on occasion also have morphologically determined allomorphs) comprises in essence the description of the classical Japanese verb.

The classical Japanese verb is inflected for eight moods, 1) indicative, 2) hypothetical, 3) provisional, 4) conditional, 5) concessive,

6) imperative, 7) gerundive, and 8) gerund. Furthermore, it is important to note that in the indicative mood there is often a critical difference of form depending on syntactic position. The indicative forms are thus divided into two sets, one which occurs only at the end of a syntactic unit and another which occurs only in non-final position.

The verb stems of classical Japanese display four morphologically determined allomorphs, here marked (a), (b), (c), and (d); for one typical member for each of the eight inflectional verb classes these are given in Table 6.

TABLE 6

Verb Classes and Stem Allomorphs

Verb Class	(a)	(b)^1	(b)^2	(c)	(d)	
I	*aruk-*	*aruk-*	*arukë-*	*aruka-*	*aruki-*	"walk"
II	*sug-*	*sugur-*	*sugure-*	*sugi-*	*sugi-*	"exceed, pass"
III	*ak-*	*akur-*	*akure-*	*ake-*	*ake-*	"open"
IV	*shin-*	*shinur-*	*shinure-*	*shina-*	*shini-*	"die"
V	*s-*	*sur-*	*sure-*	*se-*	*shi-/se-*	"do"
VI	*k-*	*kur-*	*kure-*	*ko-*	*ki-*	"come"
VII	*m-*	*mir-*	*mire-*	*mi*	*mi-*	"see"
VIII	*k-*	*ker-*	*kere-*	*ke-*	*ke-*	"kick"

NOTE: Stem allomorph (b)^1 for classical Japanese, (b)^2 for Old Japanese.

The allomorphs of the verb stems indicated by (a) through (d) in this table are used with the various endings according to the following system: (a) is used with indicative, present perfect, imperative, and gerundive endings; (b) is used with conditional and concessive endings; (c) is used with negatives, hypothetical, and provisional endings; and (d) is used with gerunds and a limited number of other perfect endings.

Each of the eight classical verb classes here distinguished as I through VIII may be briefly summarized as follows: class I consists of those verbs which in the traditional Japanese description are called *yodan* "quadri-grade" verbs. (For this terminology, inspired by the traditional order of writing the *kana*-syllabary tables, see also above; *dan* "grade" refers to the vowels, in the order *a*, *i*, *u*, *e*, *o*, so that *yodan* comprises *a* through *e*, *kami nidan* "upper bi-grade" means *a* and *i*, etc.) In addition to stems in *-k-* there are stems ending in Old Japanese *-g-*, *-s-*, *-t-*, *-F-*, *-b-*, *-m-*, and *-r-*. There is also a small subclass of class I which consists of only two verbs and has a few formal differences from class I. Class II consists of verbs whose stems ended in Old Japanese *-g-*, *-t-*, *-d-*, *-F-*, *-b-*, *-m-*, *-y-*, and *-r-*. This is the group which in the traditional Japanese morphological terminology is called *kami nidan*, "upper bi-grade." Class III, the group which the Japanese call *shimo nidan*, "lower bi-grade," consists of verbs whose stems ended in Old Japanese *-k-*, *-g-*, *-s-*, *-z-*, *-t-*, *-d-*, *-n-*, *-F-*, *-b-*, *-m-*, *-y-*, *-r-*, and *-w-*, and also of the verb *u* "possible, can." Class IV consists of only two verbs, the stems of both of which end in *-n-*; in addition to the verb cited above there is *in-u* "leave, go." Class V consists of the single verb cited, as do class VI and class VIII. Class V is traditionally described as the *sagyō sandan henkaku* or "irregular tri-grade inflection in *s*," and similarly class VI is called the *kagyō sandan henkaku*, or "irregular tri-grade inflection in *k*." Class VII consists of a small group of verbs in addition to the one cited; their initials are limited to Old Japanese *k-*, *n-*, *F-*, *m-*, *y-*, and *w-*. Class VIII is traditionally termed the *shimo ichidan*, "lower monograde" inflection.

The traditional Japanese description of the verb takes as its point of departure a variety of different verb forms from different levels of the morphology, which it arranges in the *a*, *i*, *u*, *e*, *o* order of the *kana* tables, and on the basis of this arrangement assigns to the verb classes the names involving *kami* "upper" and *shimo* "lower" *dan* "grades" given above. To these forms deriving from different morphological levels it then in addition gives the following designations: 1) *mizenkei* "indefinite form," 2) *renyōkei* "conjunctional form," 3) *shūshikei* "final form," 4) *rentaikei* "attributive form," 5) *izenkei* "conditional form," and 6) *meireikei* "imperative form."

In terms of the morphological structure of the classical Japanese verb, these traditional Japanese "form" designations correspond to the following: the first or "indefinite form" is stem allomorph (c); the second or "conjunctional form" is stem allomorph (d), which it should be noted is the same as the gerundive mood of the verb; the third or "final form" is not a stem allomorph at all but the present indicative final of the verb and hence, unlike the first two which are stems, it consists of a stem plus ending. This is also true of the fourth or "attributive form" which consists of the present indicative non-final form of the verb, again a stem plus ending rather than a stem. The fifth or "conditional form" is stem allomorph (b), while the sixth or "imperative form" is again not a stem but the imperative mood. For Old

Japanese, stem allomorph (b) must be somewhat differently arranged in order to take care of the significant difference between *-e-* and *-ë-* in certain verb forms; one result is that the stem allomorph $(b)^2$ most suitable for Old Japanese more closely resembles the traditional "conditional" form.

In this way the traditional Japanese description of the classical verb morphology mixes several levels of morphology in order to bring together items in vowel endings which it may then list in its description following the *a*, *i*, *u*, *e*, *o* order of the usual *kana* syllabary phonological arrangement. Apart from this feature the traditional description is quite workable, and in spite of its rather cumbersome methodology and nomenclature it eventually leads to much the same understanding of the structure of the verb that a description by less bizarre methods results in. Of course, one of the chief factors which determined the nature of the traditional description of the verb morphology was the *kana* syllabary itself. Since this script made no provision for writing consonants not followed by vowels it was impossible in *kana* to give graphic expression to the verb stems, which in many cases ended in consonants. Hence, if the description was to be written at all, it had at every step to take its departure from forms ending in vowels, that is to say, from forms which could be written in *kana*. Especially given these frustrating practical limitations, the description and classification of the classical verbal morphology by the philologists of the Edo period is a remarkable achievement and should perhaps receive more attention than it has in the history of linguistic science.

The technique of internal reconstruction makes it possible to see something of the process by which this system of verbal inflection evolved. If the inflected forms and their structure as combinations of stems plus endings are studied systematically it is possible to arrive at the following system which predates, probably by a considerable time span, that system which is seen in the earliest texts.

In this earliest stage of the Japanese verb there were only two main classes, stems which ended in consonants and stems which ended in vowels. The early consonant class of verb stems contained those morphemes which later were distributed among the classical verb classes I, IV, V, VI, and VIII. The early vowel class of verb stems contained those morphemes which later were distributed among the classical verb classes II, III, and VII. Among the early vowel-stem verbs there was a small group whose vowel stem ended in *-i-*; this contained those morphemes which later became verb class VII. Another larger group contained verb stems ending in *-a-*; these later became verb class III. The third and largest group contained vowel-stem verbs ending in *-ö-*, a vowel which was in ablaut relationship with Old Japanese *a*, or in vowel-stem verbs ending in *-u-*. These verbs later became members of verb class II. A feature of the verbal stem morphology at this earliest stage which should be noted is that certain verb stems among the consonant group ended in *-w-* and *-y-*. A summary of these early consonant and vowel stems is shown in Table 7.

The stem allomorphs of the language of the classical texts and the various forms on which the traditional description of classical verbal morphology is based all grew out of the suffixation of a few morphological elements to these consonant and vowel verb stems. The comparatively great diversity of the forms attested in the classical language is due in large measure to a regular process of morphophonemic replacement of vowel-plus-vowel sequences along the same lines which we have seen earlier in discussing Old Japanese phonology. Many of these replacements are attested elsewhere in the morphology of the language. In addition, the verbal morphology saw certain special replacements when stem-final *-w-* or *-y-* was followed by suffixed vowel, and these too must be taken into account in tracing the development of the various forms.

TABLE 7

Internal Reconstruction of the Classical Verb Inflection

	Stems		
	Class A (Consonant)	Class A′ (Consonant)	Class B (Vowel)
	sak- "bloom"	*sw-* "do"	*ökö-* "rise"
	ar- "has, is"	*kw-* "come"	*tuku-* "use up"
	in- "leave"	*ky-* "kick"	*maka-* "entrust"
		Endings	
Indefinite	*-a*	*-ö*	*-i*
Final	*-i*	*-i*	*-i*

These morphophonemic replacements are summarized in Table 8.

For the form which in the traditional description of the verb is called "indefinite," stem allomorph (c), the earliest stage of the verb simply added *-a-* to the consonant stems and *-i-*, a morphologically determined allomorph of this, with which *a* was in ablaut relationship in Old Japanese, to the vowel stems. All of the historical "indefinite" forms of the classical Japanese verb can be regularly derived from this morphological process in terms of the set of morphophonemic replacements below. The "conjunctional" form was the result of the addition of a suffix *-i-* to all stems, vowel and consonant alike. There is little reason to associate this morpheme *-i-* with the *-i-* allomorph of *-a-* mentioned immediately above. Again, all of the developments whose results are seen in the historical forms can be predicted from this one simple morphological operation.

TABLE 8

Morphophonemic Replacements in the Development of the Classical Verb Inflections

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1. Assimilations and simplifications of vowel sequences:
    - i) *a+i>ë*
      u+i>ï
      ö+i>ï
    - ii) *a+u>u*
      ö+u>u
    - iii) *i+u>i*
    - iv) *i+i>i*
      u+u>u
2. Assimilations and simplifications involving *-w-* and *-y-*:
    - i) *w+i>i*
      w+u>u
      w+a>ö
      w+e>ö
    - ii) *y+i>e*
      y+a>e
3. Assimilations and simplifications involving consonants:
    - i) *k+r>k*
      r+r>r
    - ii) *ö, a* before final *-ru/e>-uru/e*
    - iii) *n+r>-nur-*
      w+r>-ur-
      y+r>-er-

The third or "final" form is slightly complicated by certain instances in which suppletion has taken place in the course of the history of the forms. For morphemes which later appeared in the previously mentioned sub-group of class I the "conjunctional" form was analogically borrowed into the system at this point (*ari*, *nari*) in place of a distinctive "final" form. For the single verb of later class VIII, in much the same fashion, the fourth or "attributive" form was borrowed into the system (*keru*) which in the same way inhibited the development of a distinctive "final" form here. Apart from these cases of total replacement, which affected three verbs, the other developments were completely regular and consisted of adding the present indicative ending *-u* to all stems, vowel and consonant alike.

In the fourth or "attributive" form all the historical developments were the result of adding a morpheme *-r-* followed by the same *-u* as in the case of the present indicative just mentioned. The fifth traditional form, the "conditional," added the same morpheme *-r-* in much the same manner but followed it by a conditional-concessive morpheme *-e*, which combination was added to all stems alike. This morpheme *-e* was itself the result (except in those morphemes which later became class I verbs, where the original *-e* was preserved) of a general leveling of *-ë* to *-e*, the *-ë* coming from *a* (perhaps the *-a* of the first operation above) plus *i* (perhaps the *-i* of the second operation above).

In the last or "imperative" form of the traditional description the early stage of the verbal system, just as in the case of the first or "indefinite" form, operated with two allomorphs of a single morpheme in a regular ablaut set. The first of these, *-e*, was added to all consonant stems except the single one *ky-*. The second allomorph, *-ö*, was added either to the first "indefinite" form or to the second "conjunctional" form (it is impossible to say which) in all the vowel stems and in the only consonant stem which ended in *-y-*, namely the stem *ky-*, which later became class VIII. When the *-ö* allomorph was added a *-y-* glide appeared separating it and the vowel to which it was suffixed resulting in the historical forms *ökïyö*, *makëyö*, *miyö* and *keyö*. The generation of this *y-* glide has modern analogues, as, for example, in *miyage* "souvenir" from *mi* going with *mi-ru* "see" and *age-* from *age-ru* "give (to someone of higher status than the speaker)"; *kotowari* "truth, principle" from *koto* "fact, item" and *ari*, deverbal from *ar-u* "be, have"; or in such modern pronunciations as *shiyawase* for the formal reading pronunciation *shiawase* "happiness," from *shi-* going with *su-ru* "do" and *awase*, a causative deverbal going with *a-u* "meet, put together," or *meyaku* for formal *meiwaku* "nuisance."

In this way, the developments of the historically attested forms of the classical verb inflection may be traced from the addition, to the stems given above, of the following morphemes: 1) *-a-* and its morphologically determined allomorph *-i-*; 2) *-i-*; 3) *-u*; 4) *-r-* + *-u*; 5) *-r-* + *-e* (< *ë*); 6) *-e* and its morphologically determined allomorph *-ö*.

Descriptively the Old Japanese verb may be analyzed into a base to which are added premodal suffix morphemes followed by modal suffix morphemes. There are seven of these premodal suffix morphemes, 1) active, 2) stative, 3) negative, 4) perfective, 5) presumptive, 6) hypothetical, and 7) durative; and fourteen of the final mood morphemes, 1) indicative, 2) contingent, 3) exclamatory, 4) nominal, 5) concessive, 6) conditional, 7) provisional, 8) optative, 9) directive, 10) precative, 11) imperative, 12) conjunctive, 13) gerund, and 14) continuative. The premodal suffixes are all optional, except for the durative morpheme which is required in certain structural types, and at least one mood morpheme is present in every inflected form in the language. There is a good deal of non-automatic morpheme selection, depending on the nature of the preceding element, or in some cases on the syntactic position of the inflected form itself. Thus a form like Old Japanese *kitu* "[I] came" has the base *ki-* plus the active premodal suffix *-t-* plus the indicative modal suffix *-u*. The form *kikitekemu* "[I wonder if someone] has heard [it]" (*Man'yōshū* 3675) is constructed with the base *kik-* plus the active premodal suffix *-ite-* followed by the perfect premodal *-ke-* followed by the presumptive *-m-*, and ending in the contingent modal suffix *-u*, here required because of *ka mo* "I wonder" immediately following in the same poem, for which see the description below of the so-called *kakari musubi* constructions.

On a purely semantic basis these endings can also be divided into two main categories, and since this is a system of analysis widely employed in Japan it is also useful to consider some of its features. These two main categories are those elements which embody objective statements about the status or the nature of the action or other topic of discourse, and those which embody subjective evaluations or judgments on the part of the speaker concerning the status or nature of the topic of discourse. Other semantic factors which may be involved include time or degree of completion of an act, its volition or propriety, and often too the relation of the act or of the utterance itself to the status structure of the society.

The first category has been particularly rich throughout the history of the language in a variety of passive indicators, notably, in the Old Japanese period, *-y-* and *-r-*, and their extensions as *-ray-* and *-rar-*. Of these, *-r-* and *-rar-* were particularly important in late Old Japanese. Middle Japanese saw the widespread generalization of *-serar-* > *-sar-* in this same category. Among the several causatives which were used, Old Japanese *-sim-* and late Old Japanese *-s-* and its extension *-sas-* were especially important. In addition, the same combined passive-causative constructions which are described briefly below for the modern language also occurred historically.

Levels of speech, including indications of respect or politeness, and showing the status relationship of a particular verb form or even of the utterance as a whole to the social organization, were as important in the earlier stages of the language as they are today. Old Japanese had a verbal marker *-s-* as an indicator of respect. For similar purposes late Old Japanese made use of virtually any passive or causative formant, especially *-r-*, *-rar-*, *-s-*, *-sas-*, and *-sim-*, while Middle Japanese saw the generalization of *-nar-*, followed later by *-mai+su+r-*, *-mar+a+s-*, and *-mas-*, pointing the way to modern *-masu.*

Markers and inflectional endings of the second category are more difficult to categorize briefly since their semantic value was often extremely complicated, dealing as they did with very fine subjective distinctions on the part of the speaker. The principal such markers for perfect or completed action were *-n-*, *-t-*, *-r-*, and *-k-*, each distinguishing a slightly different variety of completed action from the point of view of the speaker. Thus, *-n-*, the stative premodal suffix above, is said by the grammarians to have been used for perfect action which occurred naturally, without outside stimulus or causation, and *-t-*, the active premodal suffix above, for similar action resulting from overt external causation. The difficulties of such fine semantic differentiations, especially when they involve historical texts of considerable time-range or from divergent dialects, are obvious, but sometimes these distinctions can be traced in the texts, and when they are identified, they increase our appreciation of the content and expression of much early Japanese literature. With *-t-* and *-n-*, for example, the following two poems provide a striking case of contrast:

Man'yōshū 1819:	
utinabiku	[gently-swaying]
haru tatinurasi	spring seems to be here;
waga kado no	on a branch
yanagi nö ure ni	of the willow at my door
uguFisu nakitu	the warbler has sung.
Man'yōshū 3655:	
ima yori Fa	any moment now
aki dukinurasi	it will really be autumn;
asibikï nö	in the shade of the [foot-sore]
yamamatu kagë ni	mountain pines
Figurasi nakinu	the cicada has sung.

(Here *utinabiku* in the first poem and *asibikï* in the second, whose translations appear in brackets, are *makura kotoba* "pillow-words," a poetic employment of special discourse described above; they contribute nothing to the problem of immediate concern here.)

The form *nakitu* in poem 1819 and the form *nakinu* in poem 3655 contrast with each other very clearly, and provide a good example of the difference in meaning between the active and stative premodal suffixes *-t-* and *-n-*. The form *nakitu* is to be analyzed as the base *nak-* plus the allomorph *-it-* of the active premodal plus the allomorph *-u* of the final indicative morpheme, the regular form which this morpheme takes after either the active or stative premodal suffix. Here the active premodal suffix shows overt external causation; the warbler has begun to sing on the willow branch because spring has really arrived, and it is this arrival of spring which has caused him to sing. In poem 3655 the form *nakinu* is to be analyzed as the base *nak-* plus the stative premodal *-n-* plus *-u*, as above. Here the premodal *-n-* indicates natural action without outside stimulus; autumn is on its way but has not come, and the cicada has begun to sing in spite of this; its song warns of the momentarily expected approach of autumn, but it is clearly not caused by it since it has not yet transpired.

Another perfect marker *-k-* was for personally-experienced perfect action, while *-ker-* and *-kem-* served for various types of action known to the speaker only by hearsay.

Negatives were constructed with *-n-* (perhaps a secondary assimilated form from an earlier **-m-*), or in certain cases with its allomorph *-z-*, this last derived from an earlier *-n+i+s* in which the *-s-* was voiced with the contraction of the sequence, *-n+i+s-* > *-ns-* > *-nz-* > -^{n}*z-* > *-z-*. This process has obvious connections with the development of the syllabic nasal and the problem of pre-nasalization in Old Japanese, sketched above. On the basis of this secondary negative *-z-* the extended negative *-zar-*, generally used in glossing Chinese texts, was fashioned.

For the wide variety of dubitative, hypothetical, and tentative moods distinguished in Old Japanese there was a correspondingly wide variety of markers, especially *-m-*, and including *-ram-*, *-ras-*, *-mas-*, *-bes-*, and *-mer-*. Once again the precise semantic differentiation of each of these involves differences in whether the action or other topic of the discourse is being treated directly or on the basis of hearsay, whether or not it involves will or determination on the part of the speaker, whether or not it is something that is capable of being changed by either the will or the future actions of the speaker, etc. Negatives are also found here, including *-z-* and *-maz-* < *-mas+i+z-*, for negation involving either strong determination on the part of the speaker or for negation of varying degrees of likelihood. From the late Old Japanese period on *-bes-*, *-maz-*, and *-m-* generally shifted to *-be-*, *-ma-*, and *-ũ-* > *-u-*, while many other once carefully distinguished forms ceased to be used.

Some of the verbal elements in the first category, as we have seen, indicated the relation of the act, the topic of discourse, or the utterance itself to the status structure of the society. These are paralleled in the second category by a system of levels of speech which throughout the history of the language has served to indicate subjective attitudes of politeness or deference, often of an extremely formalized and ritualized variety, on the part of the speaker.

In late Old Japanese *-Faber-* is the most common marker for such deferential utterances, but it fairly soon gives way to *-saFuraF-*. This eventually in its later changed form *-sōrō* gives a handy designation for a characteristic late Middle Japanese literary style, *sōrōbun*, characterized by its extremely frequent use of this element as a decorative or elegant verb formant. To this same *-saFuraF-* is related *samuraF-u* "to wait in attendance upon someone (of higher station than the speaker)," with which also goes *samurai* "a feudal retainer, a warrior." Perhaps this whole etymological complex is ultimately the result of an early borrowing from Chinese *san-lang* (title of a court official), the same Chinese term which was otherwise naturalized in Japanese as the male given name *saburō*.

The second principal word class in Japanese in many ways closely resembles the verb, but formally it is sufficiently distinct from it to merit its own separate classification:

II. THE ADJECTIVE.

This class is closely related to the Japanese verb. In the modern language, however, it is inflected for only nine of the ten categories for which verbs are inflected and does not have forms corresponding to the imperative in the verb. The base of adjectives ends in *-a*, *-o*, *-u*, or *-i* to which the inflectional endings are added. Examples of an adjective in its nine inflected categories follow: 1) non-past indicative *nagai* "is long"; 2) non-past presumptive *nagakarō;* 3) provisional *nagakereba;* 4) infinitive *nagaku;* 5) past indicative *nagakatta;* 6) past presumptive *nagakattarō;* 7) conditional *nagakattara;* 8) alternative *nagakattari;* 9) gerund *nagakute.* The translations of these individual items, apart from the gerund and the infinitive, may easily be derived in terms of the inflectional categories of the verb given above. In the modern language only one adjective is notably irregular; *yo-i* or *i-i* "good" has alternate bases in free variation in the indicative.

There is in addition an important sub-class of adjectives which are negative forms characterized both by the structure of their bases and by their inflectional endings. Each such negative adjective is derived from an underlying verb; its meaning is simply the negative which corresponds to the meaning of that verb. These negative adjectives are inflected in the same nine categories as are other adjectives. As an example the forms of the negative adjective *tabenai* "does not eat" from the verb *tabe-ru* "eat" follow: non-past indicative *tabenai;* non-past presumptive *tabemai;* provisional *tabenakereba;* infinitive *tabezu* (a "borrowing" of a literary form into the modern spoken language); past indicative *tabenakatta;* past presumptive *tabenakattarō;* conditional *tabenakattara;* alternative *tabenakattari;* and gerund *tabenakute.*

Historically too the basic identity of the verb and adjective classes was an important fact of the language, and the two differed only in the addition of distinctive adjectival morphemes to the base, before the inflectional endings.

Thus both verbs and adjectives are often seen constructed on the basis of many of the same original morphemes. Examples include *akam-u* "be red," *yowar-u* "be weak," *sawag-u* "be noisy, clamor," *kurusim-u* "suffer," against the adjective forms *akasi* "red, be red," *yowasi* "weak," *sawagasi* "noisy, troublesome," and *kurusi* "painful," with the adjectival morpheme *-s-*. Even in the historical period there is considerable evidence for the use of adjective morphemes with no intervention of suffixed elements of inflection. Thus, *awo* "green, blue," *aka* "red," and *sirö* "white" appear simply as nouns, though historically these morphemes underlie the modern adjectives *ao-i*, *aka-i*, and *shiro-i*. In other instances the original adjective morpheme appears with a nominalizing suffix, *takasa* "height," from *taka-*, *Fukasa* "depth," *atusa* "heat," or in the forms *takami*, *fukami*, and *atumi*, in substantially the same senses. These morphemes also entered into nominal-type composition: *takayama* "high hill," *Furusatö* "old village, home town," and *Finaga* "a long day (as in spring)," to be distinguished from syntactic structures such as literary *takaki yama*, modern *takai yama*, "high hill," etc. This type of inflectionless adjective construction has left its most important inheritance in modern place names, and from them, in modern surnames, a large percentage of which are of the *takayama*-type.

Reduplication of adjective morphemes was common (*töFödöFösi* "extremely far," modern *tō-i; naganagasi* "extremely long"). Similar reduplications were also seen when the resulting compound was used syntactically in the adverbial function of nouns already noted above (*kurögurö* "black, blackly," *Fukabuka* "deep," *aka'aka* "brightly"). Also without the suffixation of inflectional elements was the occasional use of an adjective in utterance-final position (*ana ömösirö* "interesting," *ana sayakë* "bright"). In a celebrated passage the *Kojiki* appears to preserve examples of inflectionless adjective forms appearing immediately before and modifying nouns, as in *e wotöko* "fine man" and *e wotöme* "fine woman." In spite of their obvious antiquity, these are curiously reminiscent of modern Kansai dialect forms of the same structure and meaning.

In Old Japanese the adjective stem was distinguished from the verb stem only by the fact that the verb stem consisted of the verb base alone while the adjective stem consisted of an adjective base plus an adjectival morpheme. It was the presence of this adjectival morpheme in the inflected forms which marked a base as adjective rather than verb. In the following table the vertical columns are adjective morphemes appearing before the same bases, the horizontal rows are sets appearing before the same suffixes and hence determined in their selection by the next following suffix morpheme:

-s-	*-s-*	*-z-*
-k-	*-sik-*	*-zik-*
-ku-	*-siku-*	*-ziku-*
-ke-	*-sike-*	*-zike-*

Adjectives may be arranged into three classes on the basis of this distribution pattern in the adjectival morphemes; the first class, going with the first vertical column above, contains the largest number of adjectives; typical examples are *öFosi* "is numerous," *tikasi* "is near," and *hayasi* "is fast." The second class has the next largest number, and includes such words as *ayasi* "is strange," *kanasi* "is sad," and *kuyasi* "is vexing." The third class has only three members, and appears originally to have been formed by noun + negative, thus, *tökizi* "is untimely, unseasonable," < *töki* "time"; *masizi* "is unlikely, improbable," < *masi* "increase, superiority"; and *onazi* "is same, similar."

The following examples of inflected Old Japanese adjective forms show how the adjective morphemes are included between the base and the other suffixed inflectional elements: *kasikosi* "fills one with awe," < *kasiko-* + adjectival morpheme (hereafter abbreviated: A) *-s-* + indicative morpheme *-i; mëdurasiki umë* "splendid plum blossoms," *mëdurasiki* < *mëdura-* + (A) *-sik-* + *-i,* the contingent morpheme, here because the adjective is immediately before and modifies a following noun; *wakakarisi hada* "(his) once youthful skin," < *waka-* + (A) *-k-* + *-ar-,* durative, + *-is-,* perfective, + *-i,* contingent, as above; *kurusikarikeri* "how painful it was," < *kuru-* + (A) *-sik-* + *-ar-,* durative, + *-ik-,* perfective, + *-er-,* durative, + *-i,* indicative.

The second class appears to have developed later than the first, perhaps through affixation of *-si-* to non-adjective morphemes and subsequent inflection of the result through *-k-* plus *-u, -i,* and *-e-re.* Thus, *sawagasi* alongside *sawag-u,* cited immediately above, *imadasi* "inconclusive, unsatisfactory" alongside *imada* "(not) yet," *otonasi* "well-behaved" alongside *otona* "adult," and *wotökowotökosi* "manly" alongside *wotöko* "male." Last of all to develop appear to have been the forms in *-k-* and *-sik-* plus final *-e-re,* which are ultimately the result of *-k-* + *-i-* + *are,* with regular replacement of the sequence *i* + *a* with *-e-.*

The complete inflectional forms of the adjectives often were built up through the contraction of forms of the verb *ar-u* "be, have" plus final inflectional endings. Even after contractions and replacements, fairly impressive sequences have been produced as a result: *utukusiku* + *ara*+*mu* > *utukusikaramu* "will be beautiful," *utukusiku*+*ari*+*ki* > *utukusikariki* "was beautiful," *utukusiku*+*aru*+*ramu* > *utukusikaruramu* "will be beautiful," *utukusiku*+*are* > *utukusikare* "be beautiful!" In the last form we see an imperative construction produced from an adjective base.

We have already seen many of the changes which account for the shifts between these early historical forms for the adjective inflection and those in the modern language. Particularly noteworthy are the loss of adjective inflectional intervocalic *-k-* before *-i* (*siroki mono, shiroi mono* "white thing") and the loss of the inflectional adjective intervocalic *-k-* before *-u* (*kanasiku omoF-u* > *kanasiu omou* > *kanashū omō* "think sadly"). As was also the case in the verb, the growing tendency from the Middle Japanese period on to ignore the older distinction between medial and non-medial forms accelerated these changes, since a phonological shift in either was then rapidly extended to the other.

In addition to the forms sketched above, Japanese verbs with very few exceptions also underlie three secondary formations which may be termed causative, passive, and potential. Further, the resulting causative formations also generally underlie still additional passive formations, thus producing a combination passive-and-causative formation. These secondary causative, passive, and potential verbs are rather unsatisfactorily treated in the traditional grammar under the category of verbal suffixes (*jodōshi*). They are actually individual lexical items derived by adding generic suffixes to the bases of the underlying verbs. In each generic category this suffix has alternate forms depending on the verb base which it follows. After a base terminating in a vowel the suffix begins with a consonant and after a base terminating in a consonant the suffix begins with the vowel *-a-*. The secondary causative formations are derived by the suffix *-sase-* or *-ase-*. The passive are derived by the suffix *-rare-* or *-are-*, and the potential is derived by the same suffix as the passive except that in the case of the potential there is a shorter alternate in *-e-* alongside *-are-* to be used after certain verb bases. In the case of the combined passive-causative formation the compound suffix which results is *-sase-rare-* or *-aserare-*, often shortened in speech to *-sasare-* or *-asare-*.

Examples of these derivations will help to make clear some of their uses. Thus *tabe-ru* "eat" underlies the causative formation *tabesase-ru* "cause to eat; feed." (Each of these secondary formations is itself a verb and may be inflected in all of the ten categories in which verbs are used.) It also underlies the passive *taberare-ru* "is eaten" (or, "is adversely affected by someone's eating something, especially something that belongs to oneself"), and the potential *taberare-ru* "can eat" or "can be eaten, is edible," as well as the combined passive-causatives *tabesaserare-ru* or *tabesasare-ru*, "is caused to eat, is fed." With another verb *matsu* /mat-u/ "wait" we find the causative *matase-ru* "causes to wait, keeps waiting," the passive *matare-ru* "is waited" or "is adversely affected by someone's waiting," the potentials *matare-ru* or *mate-ru* "can wait," and the passive-causatives *matase-rare-ru* or *matasare-ru* "is caused to wait, is kept waiting." These passives in particular and on occasion also the passive-causatives have additional important uses as specialized respectful forms along the axis of reference in the system of levels of speech.

Another important kind of secondary formation in the spoken language, and one which is exclusively concerned with relating the verb to the system of speech levels, involves the defective verb *-mas-u*. This verb has certain irregular forms in its inflections. It does not occur as a free form but only as the second constituent of the "polite" equivalents of "plain" verbs along the axis of address. Thus, equivalent to the "plain" form *tabe-ru* there is the "polite" formation *tabemasu* "eat," and equivalent to the "plain" form *matsu*, there is the "polite" form *machimasu* "wait," etc.

III. THE COPULA.

This is the third major inflected word class of Japanese and the one which, as we have noted, receives the most unsatisfactory treatment in the traditional systems of Japanese grammar. The modern copula, inflected for eight categories, is remarkable in that, unlike the two word classes listed just above, it is a class which consists of only one member. In syntax the copula serves to relate two equal items in predications of the "*a* is *b*" type; it also supplements or supersedes other inflected forms. The eight categories for which it is inflected are the same as the ten categories for which the verb is inflected minus forms for the infinitive and the imperative, or the same as the nine categories for the adjective minus forms for the infinitive. In addition the copula is morphologically complicated by having two distinct paradigms for the two extremities of the axis of address in the system of speech levels, one "plain," the other "polite."

The copula paradigm is as follows:

	Plain	Polite
indicative	*da* (*na*, *no*, [zero])	*desu*
presumptive	*darō*	*deshō*
provisional	*nara*, *naraba*	—
past indicative	*datta*	*deshita*
past presumptive	*dattarō*	*deshitarō*
conditional	*dattara*	*deshitara*, *deshitaraba*
alternative	*dattari*	*deshitari*
gerund	*de*	*deshite*

Here the alternants *nara* and *naraba* and *deshitara* and *deshitaraba* are virtually interchangeable, with the shorter forms more common in conversation. In the plain indicative *da* is the basic form; it is replaced with its allomorphs *na* and *no* in particular syntactic environments. The zero alternate of the copula occurs before the particle *ka,* and also in many sentences in newspaper style, for example, which aim at vivid and direct expression. In the expository style and in more formal conversation the plain paradigm of the copula is optionally replaced by *de,* the copula gerund, plus forms of the verb "there is." Similarly the polite copula paradigm may be replaced by this same *de* plus the polite paradigm *arimasu.*

Any paradigm with this impressive scattering of suppletive forms is sure to have resulted from an interesting set of historical changes, and the Japanese copula is no exception to the rule. Especially interesting are the developments which have brought about the present distribution in these forms, where we now have the only set in the modern language in which final and non-final forms are not identical in shape (final *da,* medial *-na-* and *-no-*); a rigid formal distinction between these two categories is one of the characteristic features of earlier stages of the language. These historical developments may be sketched as follows. The older copular constructions with *-nar-* (itself an earlier contraction < *ni+ar-*) began to decline in frequency in the Kamakura period. Their final *-r-* was at the same time apparently often abstracted from the morpheme together with the following *-i* or *-u* by a process of false analogy, leaving the copular morpheme *na.* This has survived in the modern language, typically after copular nouns (*shizuka na hito* "a quiet man"). Meanwhile, copular gerund sequences both of the pattern *ni te* and those of the pattern *ni shite* contracted to *de,* in a process which has analogues in the Old Japanese "pre-nasalization" phenomenon. The resulting *de,* regardless of its source, then came together with a morpheme *-a-,* which had in much the same fashion been abstracted from an earlier *-ar-, -ar-i, ar-u.* Following this step the combination *de+a-* underwent phonetic developments differing with the late Middle or early Modern Japanese dialect area in which they took place. Typically the Western Japan dialects saw the shift *de+a-* > *ja,* i.e. /dya/, while the Eastern dialects instead developed *da,* the form which has survived, together with *na* and other forms from the earlier *-nar-,* in the modern standard language. It has been suggested, not at all implausibly but still with insufficient documentation, that the present general popularity of the literary copula *de aru* is also somehow due to its use in translations from the Dutch during the first half of the nineteenth century.

IV. THE NOUN.

The Japanese noun is an uninflected word that occurs before the copula. Traditional Japanese grammar is particularly unsatisfactory in its classification of the Japanese noun. If syntactic criteria are used it may be arranged into seven major subdivisions:

1. GENERAL NOUNS. These form the bulk of the uninflected forms in the language. They often precede the grammatical particles and occur before the copula. They may be defined as those non-inflected forms of the language which do not fall under any of the categories otherwise established for other sub-classes of nouns or for other form classes: *heitai* "soldier," *naka* "inside," *aida* "interval," *tēburu* "table," *kyō* "today," *ima* "now," *watakushi* "I, me," *anata* "you," *koko* "this place here," *tatemono* "building" (compare *tate-ru* "build"). It is also possible to set up a sub-class consisting of forms occurring before the grammatical particle *wa* and never preceded by a modifier: *kore* "this one, this thing, this," *sore* "that one (near by)," *are* "that one (farther off)," *kō* "this way, thus."

2. PRENOUNS. These are forms which occur immediately before and modify nouns: *kono* "this," *sono* "that (near by)," *ano* "that (far off)," *onaji* "the same," *kaku* "each, every," *aru* "a certain," *dono* "which?"

3. INTERROGATIVES. These are forms occurring before the grammatical particle *ka*, never before the particle *wa* and never preceded by a modifier, such as *dare* or *donata* "who?", *dore* "which one (of several)?", *doko* "what place?", *ikaga* "how?", *ikura* "how much?", *nani* or *nan* "what?", *naze* "why?"

4. LIMITED NOUNS. These are forms always preceded by a modifier, such as *hō* "direction, side, alternative," *sō* "hearsay," *yō* "appearance, likeness, manner," *dake* "extent, limit," *bakari* "just," *yori* "more than."

5. COPULAR NOUNS. These are forms followed by the alternate *na* of the copula regardless of the following word: *shizuka* "quiet" which appears in syntax as, for example, *shizuka na hito* "a quiet person," *benri* "convenient," *suki* "pleasing," *iroiro* "various," *taihen* "grave, terrible, very much," *yō* "appearance, likeness, manner."

6. QUANTITY NOUNS. This is an important category distinguished by its occurrence in a characteristic variety of discontinuous adverbial phrase. It is further subdivided, according to morphological structure, into i) numerals, ii) numbers, and iii) indefinite quantity

nouns. The numerals further subdivide into two sets, primary and secondary.

Only the primary numerals today preserve a complete set; historically these are all loans from Chinese, and hence follow the decimal system of Chinese numerals:

ichi (*itsu*)	“1”	*roku* (*riku*)	“6”	*hyaku*	“100”
ni (*ji*)	“2”	*shichi* (*shitsu*)	“7”	*sen*	“1,000”
san	“3”	*hachi* (*hatsu*)	“8”	*man* (*ban*)	“10,000”
shi	“4”	*ku* (*kyū*)	“9”	*oku*	“100 million”
go	“5”	*jū* (<*jiFu*)	“10”		

Higher numeral combinations are made with these elements following the normal morphophonemic rules governing Chinese loanword composition in Japanese.

The most frequently used allomorphs of the primary numerals, those given first in the list above, are all in the *go'on* pronunciation, which gives some idea of their antiquity in Japanese. The alternate forms in parentheses above are in the *kan'on*. They are in part in free variation with the *go'on* forms, and in part used for composition outside of the numeral system proper; thus, *rikkokushi* “history of the six states,” *shitten battō* “seven down-fallings and eight collapses, i.e., writhe in agony or pain.” Such lexical items too are of course Chinese loans.

When “4” and “7” enter into numeral-composition the Chinese loanword forms *shi* and *shichi* are often but not always replaced with Japanese *yo*(*n*) and *nana* from among the secondary numerals. This is rationalized as an avoidance of the loanword homophones *shi* “death” and *shitsu* “loss,” but the explanation seems farfetched. Regardless of their origin such substitutions are extremely useful in the modern language. On the telephone, for example, *yo*(*n*) and *nana* are much less likely to be confused both with themselves and with other numerals than are *shi* and *shichi*. Examples of typical numeral compounds will show how the system works: *jūichi* “11,” *jūyon* “14,” *jūshichi* or *jūnana* “17,” *nijū* “10,” *nijūni* “22,” *shijū* or *yonjū* “40,’ *nihyaku* “200,” *sanbyaku* “300,” *roppyaku* “600,” *nanahyaku* “700,” *sanzen* “3,000,” *hassen* “8,000,” *sanman* “30,000.” “1965” is *sen kyūhyaku rokujūgo*.

The secondary numerals are a defective set, and for practical purposes today they are limited to the following:

hitotsu	"1"	*muttsu*	"6"
futatsu	"2"	*nanatsu*	"7"
mittsu	"3"	*yattsu*	"8"
yottsu	"4"	*kokonotsu*	"9"
itsutsu	"5"	*tō*	"10"

These are used today for simple counting which does not go above ten. They also survive, as we shall see, in certain other fixed expressions, but for any other type of counting recourse must be had to the primary numerals.

Historically these secondary numerals are the survivors of the indigenous Japanese binary numerals, an extremely cumbersome system which rapidly gave way before the impact of the more efficient decimal system of Chinese. The elaborate binary system which is found in the Old Japanese texts or which may be reconstructed from other evidence had unique elements for "1," "3," "4," and "5," while "2" was secondary and derived from "1" by vocalic ablaut, as were also "6" from "3," "8" from "4," and "10" from "5." It featured exceedingly prolix compounds for the higher combinations, as shown in Table 9.

TABLE 9

The Old Japanese Binary Numeral System

Fitö-tu	"1"	*Fata-ti*	"20"	*yörö-du*	"10000"
Futa-tu	"2"	*miso-ti*	"30"	*iFo*	"500"
mi-tu	"3"	*yöso-ti*	"40"	*ika*	"50"
yö-tu	"4"	*iso-ti*	"50"	in composition for other numerals:	
itu-tu	"5"	*muso-ti*	"60"	_*töwöamariFitötu_	"11"
mu-tu	"6"	*nanaso-ti*	"70"	_*töwöamariFutatu_	"12"
nana-tu	"7"	*yaso-ti*	"80"	_*FatatiamariFitötu_	"21"
ya-tu	"8"	_*kökönöso-ti_	"90"	*misotiamariFutatu*	"32"
kökönö-tu	"9"	*momo*	"100"		
*töwö	"10"	*ti*	"1000"		

In these Old Japanese originals of the secondary numerals the affixes *-ti*, *-tu*, *-di*, *-du* (i.e. *-t-* and its voiced variety *-d-* with the ablaut series *-i-/-u-*) can immediately be distinguished, as marked in the table above by hyphens separating them from the numeral roots. These roots themselves show how the binary feature of the system operated; *Fitö-* "1" and *Futa-* "2" represent the *-i-/-u-* ablaut set of Old Japanese. Other pairs of root numerals built up in binary fashion in terms of the Old Japanese ablaut system are "3" and "6" (*-i-/-u-*) and "4" and "8" (*-ö-/-a-*). Similarly connected are *i-tu-* in "5" and

**töwö* "10," with a prefixed *i-* in "5" of a type common throughout Old Japanese.

The Old Japanese numerals for "4," "8," and "10" go quite regularly with Common Tungusic, and hence can also be related to proto-Altaic; original Tungusic **d* and **ž* appear as Old Japanese *y-* before original front vowels, but as Old Japanese *t-* before original back vowels. Hence Old Japanese *yö-* "4" goes with Manchu *duin*, Goldi *duin*, Evenki *digin*, < **dügün* "4," but Old Japanese **töwö* "10" goes with Manchu *žuwan*, Goldi *zoan*, Evenki *zān*, <**žuwan* "10." In Old Japanese *ya-* "8" the initial should have been historically **t-* (cf. *tako* "octopus"), going with Manchu *žakûn*, Goldi *zapkun*, Evenki *zapkun*, <**žapkun* "8," but the form appears with a *y-* instead due to paradigm analogy with "4." Old Japanese *nana-* is perhaps reminiscent of Manchu *nadan* "7," a Common Tungusic form, but otherwise the correspondence is difficult to account for. Korean *yëlë-s* "numerous" (<*yël* "10"!) has been compared with *yörö-du*, which also and originally meant any great or unmeasurable number. Etymologies for the numerals within Japanese itself are not rewarding. The association, for example, of the numeral *mi-tu* "3" with the verb *mitsu* /mit-u/ "be full" and similar explanations are probably little more than folk-etymologies of no great significance. Old Japanese *kökönö-* "9" is perhaps to be associated with Old Japanese *kokora* "extremely, many." Old Japanese **töwö* may also be connected, in an ablaut series, with *tawam-u* "bend." The word *Fata-ti* "20" is clearly built on *Fitö-* "1" and *Futa-* "2," but the *-so* element of the other tens is obscure. In the forms for the teens, *amari* is a deverbal from *amar-u* "be in excess."

In addition to their use in simple counting, descendants of the original Japanese numerals survive in nominal composition, both with their common suffixed element (*mitsugo* "3-year old child," *yotsuashi* "quadruped") and without it (*futago* "twin," *mikeneko* "three-haired cat, i.e., a tortoise-shell"). They are also used in some extremely common words for counting certain of the days of the month:

futsuka	"2nd (day of the month)"	*nanoka*	"7th"
mikka	"3rd"	*yōka*	"8th"
yokka	"4th"	*kokonoka*	"9th"
itsuka	"5th"	*tōka*	"10th"
muika	"6th"	*hatsuka*	"20th"

In addition, *hatachi* "20-years of age" and *misoka* "30th day of the (lunar) month" also preserve original Japanese numerals.

The numbers consist of compounds of either set of the numerals plus forms which are called counters or numeral classifiers. Thus *ichijikan* "1 hour," *nifun* "2 minutes," *san'en* "¥3," *issatsu* "1 (when speaking of or counting volumes of printed books)," *nihon* "2 (when speaking of or counting cylindrical objects)," *sanmai* "3 (when speaking of or counting thin flat objects)," *hitoban* "1 night," *futahako* "2 boxfuls," *mitsuki* "3 months," *hitori* "1 person," *futari* "2 persons," *mikka* "3 days; the 3rd day." Most but not all these counters are bound forms, and it is interesting to note that the counter for persons preserves an early Japanese form for "person" or "man" not otherwise attested, *-tori*, *-tari*.

The counters are of two general types. The unit counters are general measures for quantitative units of continuous or divisible items: *-en* "¥ (the unit of Japanese currency)," *-ji* "o'clock," *-jikan* "hour," *-doru* "dollars," *-guramu* "gram," *-mētoru* "meter" (and so also for the entire metric system!), *-sai* "year of age," *-do* "time, occasion," *-peiji* "page (in a western-style printed book)," etc. The others are class counters, itemizers for counting entities which relate to large classes of nouns the members of which often have some definable semantic features in common, such as some special physical configuration or other feature of appearance or structure: *-hon* "cylindrical, slender objects," *-mai* "thin, flat objects," *-ken* "buildings," *-seki* "warships," *-tō* "large domesticated animals," *-hiki* "(other) animals," *-furi* "swords," *-hashira* "Shintō deities," etc. (*hashira* is otherwise "pillar," and as a counter here perhaps recalls phallic elements in the indigenous Japanese religion.)

The entire system of counters in Japanese is the result of widespread loans from Chinese, where the system is old and original. With the coming of Chinese language and learning to Japan, the affixed element *-ti*, *-tu* and its voiced variety *-di*, *-du* which we have seen in the Old Japanese binary numeral system above was analyzed as if it were a feature parallel to the Chinese system of numerals plus counters. This made it possible to take over the entire Chinese counter system in short order, and also to incorporate native Japanese elements into it, as in the case of the last two examples immediately above. The unit counters are still extremely important in the modern language, as is evident from their semantic range, but the class counters have not survived to the same extent. In classical and written Japanese they are a tremendously refined system, which in effect consists of all the resources of the original Chinese system plus Japanese additions. By comparison in the modern language only vestiges still appear.

These number compounds have their own morphophonemics which have been conveniently described by Martin; in particular it should be noted that the original shape of *jū* < *jiFu* "ten" is well attested by such compounds as *jippun* "10 minutes," *jippon* "10 cylindrical objects," and *jippiki* "10 animals."

Finally, there are the indefinite quantity nouns, distinguished as a category by occurrence in distinctive syntactic structures; these include such words as *takusan* "many, much," *ōzei* "many (persons)," *sukoshi* "few, little," and *amari* "too much" (compare the use of this form in the Old Japanese numeral system).

7. PARTICIPIAL NOUNS. These are forms occurring rarely as syntactic nuclei in noun expressions but commonly as syntactic nuclei in certain kinds of clauses: *arukinagara* "while walking," *tsukishidai* "as soon as someone arrives." Morphologically these consist of the infinitive of a verb or the base of an adjective plus one of the bound morphemes *-nagara* or *-shidai.*

It is also possible to identify an intersecting sub-class of nouns which might be termed adverbs, or nouns with characteristic adverbial use, as they appear in syntax without a following grammatical particle: *sukoshi* "a little," *maiban* "every evening," *shikashi* "however." Another analysis, however, identifies the adverb as an additional major word class of the language and identifies it as an uninflected word occurring as a pause group by itself but not before the copula. The adverb established according to this analysis has three subclasses: i) connective adverbs, which always begin a clause, such as *soshite* "then, and," *aruiwa* "or," *shikashi* "but," *keredomo* "nevertheless," *to* "so saying"; ii) modal adverbs, which do not always begin a clause, such as *nakanaka* "considerably, quite, very," *chōdo* "exactly, just," *mō* "more, anymore, already," *mata* "again"; and iii) interjections, which are adverbs rarely or never occurring in major sentences, being generally found alone as minor sentences and sometimes only in this way, such as *hai* "yes," *dōzo* "please," *oi* "hey!"

It will have been noticed that such words as *watakushi* "I," *anata* "you," and others which are translated by the English pronouns are found under "general nouns," along with words such as *koko* "here," *soko* "there," etc. At the same time *kore* "this," *sore* "that" and *are* "that over there" find their place in a sub-class of these general nouns, and *kono* "this," *sono* "that" and *ano* "that over there" are classified as pronouns. Such classifications do not of course run parallel to the categories of English grammar, which is only to be expected in a language of totally different structure. Precisely because of this difference it is useful to note that Japanese has historically used an enormous variety of words to refer to speaker, person spoken to, and person spoken of, i.e., for what are in many other languages called the personal pronouns. Some of these at certain times and in particular contexts belong to noun categories other than that of the "general noun." For example, *anata* "you" is one of the "general nouns," but it also appears as an interjection, *anata!*, typically as an attention-getting device in the speech of a woman to her husband.

There are two basic reasons for this great repertory of forms. The first is something of a paradox. Japanese has this enormous lexicon of "personal pronouns" because it has never really had any "personal pronouns" at all. This is to say, these forms have always been either special uses of nouns meaning "that one there," "this one here," and the like, or they have been nouns meaning such things as "this humble person," "you, that exalted person," etc. As with other areas of the language, here too the rich resources of the Chinese loanword vocabulary have been added to the native Japanese lexical materials. As a result the total inventory reaches formidable proportions at any stage in the history of the language, and when taken all together in a diachronic survey it is truly overwhelming.

The other reason is to be found in the complex and rigidly graduated structure of traditional Japanese society. Just as we have already seen concerning the entire system of levels of speech, the forms of Japanese are so ordered as to reflect the ordering of Japanese society. This ordering into categories is especially evident in words which are used for direct reference to speaker, person spoken to, and person spoken of. The relationship of such words to the categories of society has a directness and an immediacy generally well in excess of those to be observed for other areas of the vocabulary. As one result, the multiplicity of these words reflects in an almost one-to-one ratio the many levels into which Japanese society itself is structured.

Apart from this, some of these words also fit into a general quadri-level system of reference, of which the following is an outline as it is found in Old Japanese (note the words for "indefinite" reference, from which originate many of the modern interrogatives):

	Most Proximate	Middle Distance	Most Remote	Indefinite
Demonstratives	_kö, köre_	_sö, söre_	_ka, kare_	_idu-re_
Place words	_kökö_	_sökö_	*_kasiko_	_idu-ku_
Direction words:				
(Old Japanese)	*_kö-ti_	*_sö-ti_	*_a-ti_	_idu-ti_
(Late Old Japanese)	_ko-nata_	_so-nata_	_ka-nata,_ _a-nata_	

The relation of this set to some of the words used for speaker and for persons spoken to and of will be immediately apparent; *konata* is also "I," *sonata* is Middle Japanese "you," *kanata* is "he, she," and *anata* is Middle Japanese "he, she," but modern "you."

Even without labels to show their precise relationship to the social structure, a partial listing of some of the historically attested forms for speaker and person spoken to at various stages of the language is not only interesting but impressive:

Forms for Speaker

Old Japanese	*a, are, wa, ware, önö, önöre*
Late Old Japanese	*wa, ware, maro*
Early Middle Japanese	*ware, wanami, maro, maru, orera* (pl.), *warawa* (fem.)
Late Middle Japanese	*mi, midomo, wagami, soregashi, watakushi, kochi, konata, kono hō, wanami, ore, warawa* (fem.), *sessha*
Early Modern Japanese	*kochi, kochitora* (pl.), *soregashi, watakushi, watashi, washi, watchi, midomo, ore, orera* (pl.), *oira* (pl.), *temae, temaedomo* (pl.), *sessha*
Modern Japanese	*watakushi* (< *wa(-re)* + a variant of *tsukushi* "exhausting"?), *watashi, washi, atakushi, atashi, temae, waga hai, boku, ore, ora, oira* (pl.)

Forms for Person Spoken To

Old Japanese	*na, nare, öre, masi, imai, mimasi*
Late Old Japanese	*na, nare, kimi, nanji* < *nandi* < *namuti, kinji* < *kindi* < *kimuti*
Early Middle Japanese	*nanji, nandachi* (pl.), *kimi, dono, okoto, onmi, gohen*
Late Middle Japanese	*nushi, onushi, sochi, sonata, sono hō, konata, ware, wadono, miuchi, wagoryo, kokonamono, nanji, kisho, kihō, kihen*
Early Modern Japanese	*omae, omaesan, nushi, onoshi, nishi, konata, konatasama* > *konasan, konta-shu* (pl.), *sonata, sonatasama, sochi, onmi, omi, anata, kisama, sokomoto, katasama, otemae, onore, ware, waresama, kidono*
Modern Japanese	*anata, anta, sensei, omae, kimi, kisama, temae*

These lists could be further expanded by the inclusion of many more such specialized items as *chin* "I (of the Emperor, speaking of himself)," or *honkan* "I (of someone in an official post, speaking of himself)," and the like.

V. THE POST-POSITIONS, OR GRAMMATICAL PARTICLES.

These can be further subdivided into sentence particles, which occur in final predicates; clause particles, which occur in non-final predicates; referent particles, which occur after noun expressions to form relational phrases; quotative particles, which occur after sentences to form quotational phrases; and conjunctive particles, which occur after each of two or more nouns or after each except the last to form noun expressions.

The most common sentence particles are *ka,* which after an indicative or presumptive nucleus marks a question; *na,* which after a non-past indicative verbal nucleus in the plain form marks a negative command; *yo,* which after an indicative or imperative nucleus marks an emphatic statement or command; and *zo,* which after an indicative nucleus marks an emphatic statement.

The most common clause particles are *ga* "but," *shi* "and," *kara* "because," *keredomo* "although," *made* "until," and *to* "whenever, when, if." Each of these has limitations on its occurrence and constitutes a clause particle only in particular syntactic environments which cannot be fully described here.

The most common referent particles are *ga* used for the emphatic subject, *wa* used for the generalized topic, *o* used for the direct object, *de* "by means of, in, on, at," *e* "to (of motion)," *kara* "from, after (of place or time)," *made* "as far as, up to, until (of place or time)," *ni* "in, on, at, to, into," *to* "with," *dake* "only," *shika* "only, nothing but," *bakari* "just, nothing but," *yori* "more than," *hodo* "to the extent of, as much as," *ka* "indefinite," *nado* "and the like," *mo* "also, even," and *no* "of." We have already discussed some of the ways in which this last particle is employed; both in the modern language and historically it is used to build up surprisingly long syntactic strings, which in spite of their repetitiousness do not seem to have been stylistically unpleasing at any stage in the language. For example, *furusato no Yoshino no miya no haru no yo no tsuki* "the moon on a spring night (seen) from the palace in Yoshino, (our) native country," can be cited from the *Kinkai wakashū* of 1213 by Minamoto Sanetomo, the last Minamoto *shōgun* and a celebrated poet.

There are only two quotative particles, *to* which follows any kind of quotation and *ka* which follows only quotations in the form of a sentence. There are four conjunctive particles, *to* "and," used when the enumerated series is complete, *ya* "and," used when the enumerated series is not complete, *ni* "and," equivalent in meaning to *to* but much less common, and *ka* "or." Many of the particles admit of quite rigorous comparison with parallel elements in Altaic, particularly with Common Tungusic, as Murayama has shown.

In its syntax the modern standard language favors a major sentence which ends in a final clause optionally preceded by virtually any number of non-final clauses. All clauses end in predicates, and in some clauses this final predicate is preceded by one or more clause attributes. There are also minor sentences and fragments.

Every predicate contains an inflected word as its nucleus. In the final predicate this inflected word is an indicative, presumptive, or imperative form which is often followed by a closing sentence particle. In non-final predicates the inflected form is generally followed by a clause particle. Relational, adverbial, and quotational phrases all function as clause attributes, i.e., they are elements preceding the predicate in a clause. The relational phrase is typically a noun followed by a referent particle. The adverbial phrase is often a single noun, and a quotational phrase consists of a quotation, which may be any of a wide variety of syntactic constructions, followed by the quotational particle *to* or *ka*.

Other syntactic units of importance are the noun expression, a noun plus one or more preceding modifiers, the pseudo-predicate, typically constructed with an infinitive or a gerund, the phrasal modifier, a relational phrase with the referent particle *no*, the clausal modifier, with an indicative inflected form modifying a noun or noun expression, and the verb phrase.

The functioning of these syntactic elements may best be observed in summary form by an analysis of the following text, a short newspaper article in the impersonal written style, presented first in transcription and translation:

(1) sansaihan no oi to asonde iru to 'wakannai ya' to ka 'itchatta' nado to, tokiori, Tōkyōben o tsukau. (2) ryōshi tomo kansaijin de, ima mo Kansai ni sunde iru no da kara, katei de Tōkyōben wa mattaku mimi ni shinai hazu de aru. (3) kinjo ni Tōkyō kara hikkoshite kita uchi ga ari, soko ni onaji toshigoro no kodomo demo iru no ka to omottara, sō yū koto mo nai. (4) kansaijin de Tōkyōben o tsukau to 'Hakone no mukō e itta koto no nai Edokko' to azakerarerushi, Tōkyō ni nagaku sunde ite mo, Kansai shusshinsha wa yōi ni Tōkyōben ni dōka sezu, Kansai namari ga nokoru mono na no da ga, oi no Tōkyōben wa, nakanaka, azayaka de aru.

(1) When I am playing with my three-and-a-half year old nephew he sometimes uses Tokyo dialect expressions such as *wakannaiya* "I don't understand" or *itchatta* "he went." (2) Since both his parents are persons from the Kansai (Western Japan) and are living in the Kansai now, there should be no occasion at all for him to hear the Tokyo dialect in the home. (3) There is a family nearby which has moved there from Tokyo and I wondered if perhaps there might be a child in it of the same age as he, but such was not the case. (4) When people from the Kansai use Tokyo dialect they are laughed at as being "Tokyo-natives who have never been on the other side of the Hakone Mountains," and even if they have lived a long time in Tokyo persons originally from the Kansai area find it very difficult to assimilate to the Tokyo dialect; the Kansai accent lingers on with them, but my nephew's Tokyo speech is extremely natural.

(5) nan no koto wa nai. (6) kore wa terebi manga no eikyō datta.

(5) It turned out to be nothing but this. (6) This was the influence of cartoons on the television.

(7) shūi mina Kansaiben no naka de sodatte kita kara, kichō wa Kansaiben na no da ga, terebi de oboeta kotoba ga, sono naka ni hasamaru no de aru. (8) yōgosū mo hyōgenryoku mo, niwaka ni yutaka ni naru toshigoro no koto, terebi de mimi ni shita kotoba o, kaimen ga mizu o su'u yō ni, kyūshū sururashii.	(7) Since he has been brought up completely surrounded by the Kansai dialect the basis (of his speech) is Kansai dialect, but the words that he has learned from the television are sandwiched in among this. (8) He is just at the age when his vocabulary and his expressive power both suddenly become very fluent and he seems to absorb words which he has heard on the television like a sponge soaking up water.
(9) kono yō na Tōkyōben no shintō ga, ii koto ka, warui koto ka, niwaka ni dantei wa dekinai. (10) koto ni Tōkyōben o kyōtsūgo ni shiyō to suru ugoki ni tsuite wa Kansai de nezuyoi teikō ga atte, karugarushiku ketchaku wa tsukerarenai.	(9) It is not easy to make a quick judgment as to whether this kind of permeation by the Tokyo dialect is something which is good or bad. (10) There is an especially deep-seated resistance in the Kansai to the movement which is attempting to make the dialect of Tokyo the common language, and a conclusion will not be reached easily.
(11) da ga, genjitsu ni wa, kō shita rongi o tōrikoshite, Tōkyōben no zenkoku seiha wa chakuchaku to kō o sō shitsutsu aru. (12) terebi no iryoku wa susamajii.	(11) But even so, as a matter of actual fact, the national hegemony of the Tokyo dialect is gradually achieving success, quite apart from such debates. (12) The power of television is tremendous.

In the original text transcribed here the script consists of Chinese characters and *hiragana* except for the word *terebi* from English *television* which is written in *katakana,* the two citations from the Tokyo dialect which are also in *katakana,* and the word *oi* "nephew" which is written in *katakana* to avoid using a fairly obscure Chinese character. Otherwise the Chinese loanwords are generally written in Chinese characters, and many of the Japanese forms are also written in part in Chinese characters as *kun.*

In a completely valid syntactic analysis of this text it would be necessary first of all to study and record the suprasegmental features of juncture and stress which structure it into major syntactic elements, and which provide the essential keys to the analysis. With this written text this step has been omitted, and the lack of this information supplied partly from the punctuation of the text itself (which in general follows these same features), partly from parallels with other oral texts.

Here and below the essential constituent elements of the syntax are indicated by abbreviations as follows:

A	adverbial phrase
a	adjective
c	copula
cm	clausal modifier
cp	copula phrase
n	noun
ne	noun expression
P′	final predicate
P″	non-final predicate
p	particle
pm	phrasal modifier
Q	quotational phrase
q	quotation
R	relational phrase
sc	pseudo-clause
sp	pseudo-predicate
v	verb
vg	gerund
vp	verb phrase

It will be noted that capital-letter abbreviations are used for major constituent elements, and lower-class abbreviations for elements of lesser orders and for form classes. In the syntactic analysis subdivisions of form classes are not indicated, as, for example, particular inflected forms for verbs or adjectives, or sub-varieties of particles, etc. Numbers following the abbreviations for major constituent elements (R1, R2, R3) indicate their ordering in each sentence.

[1] (R1) sansaihan no oi to (P″) asonde iru to (Q) 'wakannai ya' to ka 'itchatta' nado to, (A) tokiori, (R2) Tōkyōben o (P′) tsukau.

[2] (R1) ryōshin tomo (P″1) Kansaijin de, (R2) ima mo (R3) Kansai ni (P″2) sunde iru no da kara, (R4) katei de (R5) Tōkyōben wa (A) mattaku (P′) mimi ni shinai hazu de aru. [3] (R1) kinjo ni (R2) Tōkyō kara hikkoshite kita uchi ga (P″1) ari, (R3) soko ni (Q) onaji toshigoro no kodomo demo iru no ka to (P″2) omottara, (R4) sō yū koto mo (P′) nai. [4] (P″1) Kansaijin de (R1) Tōkyōben o (P″2) tsukau to (Q) 'Hakone no mukō e itta koto no nai Edokko' to (P″3) azakerarerushi, (A1) Tōkyō ni nagaku sunde ite mo, (R2) Kansai shusshinsha wa (R3) yōi ni (R4) Tōkyōben ni (P″4) dōka sezu, (R5) Kansai namari ga (P″5) nokoru mono na no da ga, (R6) oi no Tōkyōben wa, (A2) nakanaka, (P′) azayaka de aru.

[5] (R1) nan no koto wa (P′) nai. [6] (R1) kore wa (P′) terebi manga no eikyō datta. [7] (A) shūi mina (R1) Kansaiben no naka de (P″1) sodatte kita kara, (R2) kichō wa (P″2) Kansaiben na no da ga, (R3) terebi de oboeta kotoba ga, (R4) sono naka ni (P′) hasamaru no de aru. [8] (R1) yōgosū mo (R2) hyōgenryoku mo, (R3) niwaka ni (P″) yutaka ni naru toshigoro no koto, (R4) terebi de mimi ni shita kotoba o, (R5) kaimen ga mizu o su'u yō ni, (P′) kyūshū sururashii.

[9] (R1) kono yō na Tōkyōben no shintō ga, (P″1) ii koto ka, (P″2) warui koto ka, (R2) niwaka ni (R3) dantei wa (P′) dekinai. [10] (R1) koto ni (R2) Tōkyōben o kyōtsūgo ni shiyō to suru ugoki ni tsuite wa (R3) Kansai de (R4) nezuyoi teikō ga (P″) atte, (A) karugarushiku (R5) ketchaku wa (P′) tsukerarenai.

[11] (P″1) da ga, (R1) genjitsu ni wa, (R2) kō shita rongi o (P″2) tōrikoshite, (R3) Tōkyōben no zenkoku seiha wa (R4) chakuchaku to (R5) kō o (P′) sō shitsutsu aru. [12] (R) terebi no iryoku wa (P′) susamajii.

The first nine sentences of this text are now given a more elaborate analysis in several different presentations, [1] through [6] by means of concise syntactic formulas, [7] in a graphic expansion and [8] and [9] in a verbal expansion of one of these syntactic formulas. A few notes on the other features of the text are also included.

[1] R1: *sansaihan no oi to*
ne......... p "with + [my 3½ year old nephew]"
pm......n "[3½ year old] nephew"
n-p "[3½ year old] + [referent particle] *no*"
P″: *asonde iru to*
vp......... p "whenever + [I am playing]"
vg......v "play" + "[I] am"

These analytical presentations of these two syntactic elements may be summarized (minus their glosses) in the following syntactic formulas:

R1 [ne ${}_1$(pm ${}_2$(n–p)$_2$ n)$_1$ p] P″ [vp (vg–v) p].

Continuing this formula presentation, the remainder of the syntactic structure of [1] is: Q [q ${}_1$(R ${}_2$(x–p–p–x)$_2$ p)$_2$)$_1$ p] A [n–n] R2 [n–p] P′ [v].

Here x stands for the two citations of typical Tokyo contracted forms in the text, *wakannai ya* for *wakaranai* "I don't understand" and *itchatta* for *itte shimatta* "(completely) gone."

In the following sentences only the syntactic formulas are given:

[2] R1 [n–p] P″1 [n–p] R2 [n–p] R3 [n–p] P″2 [vp ${}_1$(vp ${}_2$(vp ${}_3$(vg–v)$_3$ p)$_2$ c)$_1$ p] R4 [n–p] R5 [n–p] A [n] P′ [vp ${}_1$(ne ${}_2$(R ${}_3$(n–p)$_3$ v)$_2$ n)$_1$ v].

The Kansai area is the traditional Western Japan dialect region; *Kansai* means "west of the pass," referring to the Hakone Mountains which form a natural barrier between this region and eastern or Kantō ("east of the pass") Japan. Cf. the reference to the Hakone Mountains in [4] below. *mimi ni suru* is lit. "do in the ears," i.e., "hear."

[3] R1 [n–p] R2 [ne ${}_1$(cm ${}_2$(ne ${}_3$(n–p ${}_4$(vg–v)$_4$ vp)$_3$ vp)$_2$ n)$_1$ p] P″1 [v] R3 [n–p] Q [q ${}_1$(vp ${}_2$(vp ${}_3$(R ${}_4$(ne ${}_5$(pm ${}_6$(n–n–p)$_6$ n)$_5$ p)$_4$ v)$_3$ c)$_2$ p)$_1$ p] P″2 [v] R4 [ne ${}_1$(cm ${}_2$(n–v)$_2$ n)$_1$ p] P′ [a].

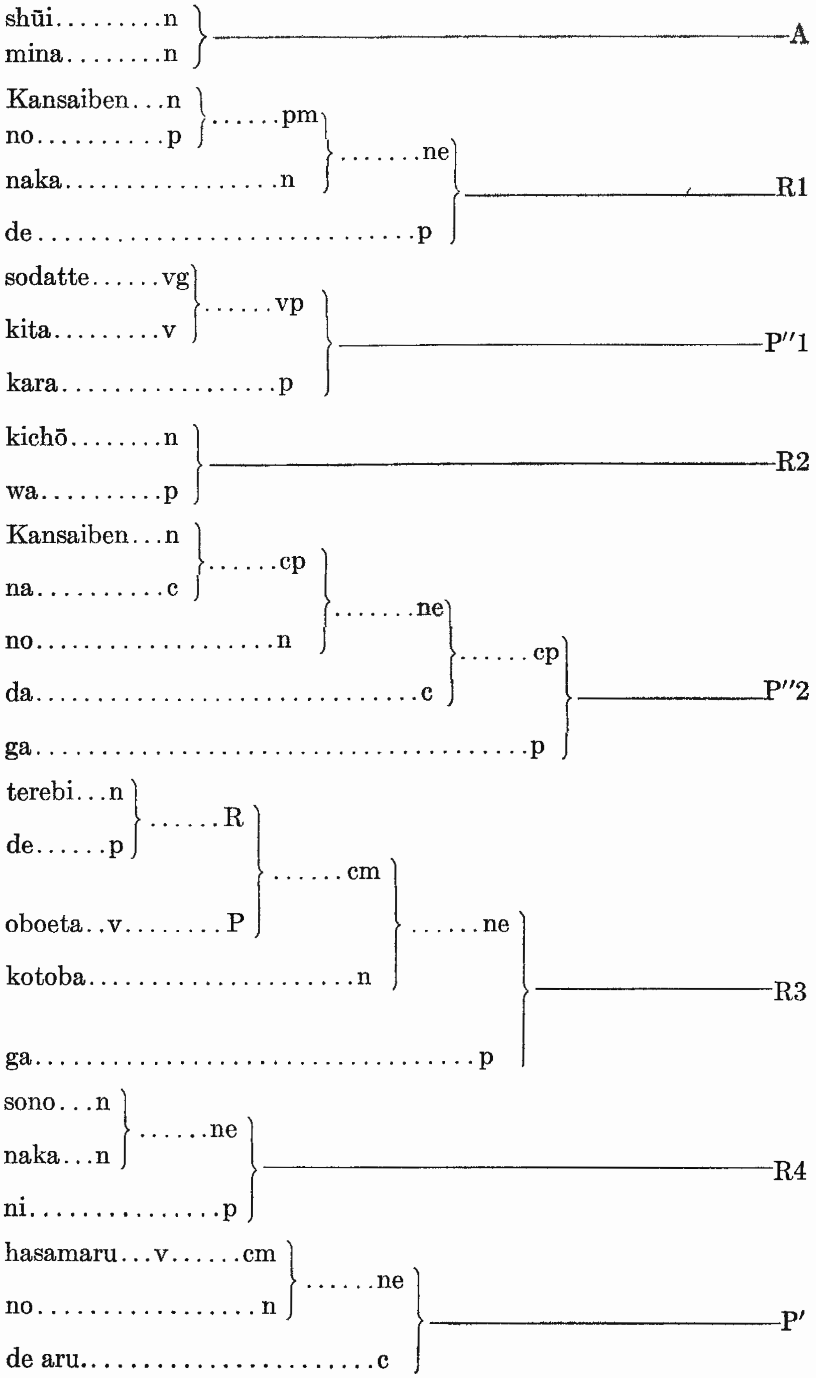
[4] P″1 [n–c] R1 [n–p] P″2 [v–p] Q [ne ${}_1$(cm ${}_2$(pm ${}_3$(ne ${}_4$(cm ${}_5$(R ${}_6$(ne ${}_7$(pm ${}_8$(n–p)$_8$ n)$_7$ p)$_6$ v)$_5$ n)$_4$ p)$_3$ v)$_2$ n)$_1$ p] P″3 [v–p] A1 [sp ${}_1$(A ${}_2$(R ${}_3$(n–p)$_3$ a)$_2$ ${}_2$(vg–vg)$_2$ P″)$_1$ p] R2 [ne (n–n) p] R3 [n–p] R4 [n–p] P″4 [n–v] R5 [ne (n–n) p] P″5 [cp ${}_1$(ne ${}_2$(cm ${}_3$(ne ${}_4$(cm ${}_5$(v)$_5$ n)$_4$ c)$_3$ n)$_2$ c)$_1$ p] R6 [ne ${}_1$(pm ${}_2$(n–p)$_2$ n)$_1$ p] A2 [n–n] P′ [cp (n–c)].

The word *Edokko* is lit. "a child of Edo," the old place name for modern Tokyo; it is <*edo tsu ko* "id." with the rare allomorph *tsu* of the referent particle *no;* in the script it is written with *edo* and *ko* in Chinese characters, as *kun* writings, and a small *tsu* in *hiragana* inserted before the *ko* to indicate the *-kk-* geminate consonant. Here the *kana* writing is (accidentally) historically accurate. The difficulties in assimilation to Tokyo speech to which the text has reference are particularly those of the pitch system. *sezu* is a literary negative form from *su-ru* "do."

[5] R′ [ne ${}_1$(pm ${}_2$(n–p)$_2$ n)$_1$ p] P′ [a].

[6] R1 [n–p] P′ [ne ${}_1$(pm ${}_2$(n–p)$_2$ n)$_1$ c].

[7]


shūi . . . . n
mina . . . . n
A
Kansaiben . . . n
no . . . . p
pm
naka . . . . n
ne
de . . . . p
R1
sodatte . . . . . . vg
kita v
vp
kara . . . . p
P″1
kichō . . . . n
wa . . . . p
R2
Kansaiben . . . n
na c
cp
no . . . . n
ne
da c
cp
ga . . . . p
P″2
terebi . . . n
de . . . . . . p
R
oboeta . . v . . . . P
cm
kotoba . . . . n
ne
ga . . . . p
R3
sono . . . n
naka . . . n
ne
ni . . . . p
R4
hasamaru . . . v . . . . . . cm
no . . . . n
ne
de aru c
P′

[8] yōgosū mo hyōgenryoku mo niwaka ni yutaka ni naru toshigoro
R1 R2 R3 P″
no koto, terebi de mimi ni shita kotoba o, kaimen ga mizu o su'u
R4 R5
yō ni, kyūshū sururashii.
P′

R1 : noun *yōgosū* "number of words used, vocabulary" + referent particle *mo* "also, too."

R2 : noun *hyōgenryoku* "expressive ability" + referent particle as above.

R3 : noun *niwaka* "sudden" + referent particle *ni* "by, -ly."

P″ : copular phrase : noun expression + zero alternate of copula.

noun expression : phrasal modifier + noun *koto* "fact."

phrasal modifier : noun expression + referrent particle *no* "of."

noun expression : clausal modifier + noun *toshigoro* "age."

clausal modifier : relational phrase + verbal *naru* "become."

relational phrase : noun *yutaka* "fluent" + referent particle *ni*.

R4 : noun expression + referent particle *o* "direct object."

noun expression : clausal modifier + noun *kotoba* "words."

clausal modifier : two relational phrases + verb *shita* "did."

R^1 : noun *terebi* "TV" + referent particle *de* "by."

R^2 : noun *mimi* "ear" + referent particle *ni* "in."

R5 : noun expression + referent particle *ni* "in."

noun expression : clausal modifier + noun *yō* "manner."

clausal modifier : two relational phrases + verb *su'u* "soak up."

R^1 : noun *kaimen* "sponge" + referent particle *ga* "subject."

R^2 : noun *mizu* "water" + referent particle *o* "direct object."

P′ : verb phrase + bound adjective *-rashii* "seems to be."

verb phrase : noun *kyūshū* "absorption" + verb *suru* "do."

[9] kono yō na Tōkyōben no shintō ga, ii koto ka, warui koto ka,
R1 P″1 P″2
niwaka ni dantei wa dekinai.
R2 R3 P′

R1 : noun expression + referent particle *ga.*

noun expression : phrasal modifier + noun *shintō* "permeation."

phrasal modifier : noun expression + referent particle *no.*

noun expression : copular phrase + noun *Tōkyōben* "T. dialect."

copular phrase : noun expression + copula alternate *na.*

noun expression : noun *kono* "this" + noun *yō* "kind."

P″1 : copular phrase + sentence particle *ka* "?"

copular phrase : noun expression + zero alternate of copula.

noun expression : adjective *ii* "good" + noun *koto* "fact."

P″2 : (identical with P″1 above, but with adjective *warui* "bad.")

R2 : noun *niwaka* + referent particle *ni,* as above.

R3 : noun *dantei* "decision" + referent particle *wa* "emphatic subject."

P′ : adjective *dekinai* "is not possible."

In [10] the adjective *nezuyoi* "deeply seated" is derived from the noun *ne* "root" + the adjective *tsuyoi* "strong," with typical voicing of the initial in the second (adjective) element; hence the construction of this word is noun + adjective, a structure "different in kind from all the constructions established up to that point," i.e., different from the syntactic constructions with which this analysis has been dealing. This type of difference marks, in Japanese, the distinction between syntax and morphology.

For the earlier stages of the language a similar process of syntactic analysis could also be applied to the texts to reveal their constituent elements; a few studies of this type have been done but the greater part of this work remains for the future.

One of the more remarkable features of Old Japanese syntax may, however, be artificially isolated here for brief comment in conclusion. This is the system of discontinuous correlation between certain particles and certain final suffixes in inflected forms, observed in the texts even when the particles are sometimes at a considerable distance within the syntactic structure from the inflected forms with which they correlate. This phenomenon is called *kakari musubi* by the Japanese grammarians, a term which eventually goes back to the work of Motoori.

This phenomenon of discontinuous correlation in syntax is particularly frequent in Old Japanese with the interrogative particles *ka* and *ya,* and with the exclamatory or emphatic particles *sö* [> *zo*), *namö,* and *namu, kösö, yamö,* and *wo* (< **wö*?). The texts, as discussed above, show confusion of *-o* and *-ö* after *m-* by the time of the *Man'yōshū,* but it is possible to isolate an exclamatory morpheme *-ö* from *sö* and *kösö,* and on the basis of this we may with some confidence write *namö* and *yamö,* and perhaps also **wö.*

All the particles which participate in this discontinuous syntactic phenomenon have in common the fact that they go together with ("require" or "take") a final contingent morpheme *-u* in place of an expected final indicative morpheme *-i* with verbs, or, with *kösö,* a final exclamatory morpheme *-ë;* similarly, with adjectives contingent forms appear even when the adjectives are displaced from their referent nouns.

Man'yōshū examples include the following: *miyabiwo tö ware Fa kikeru wo* "though I hear that you are a fashionable fellow," with *kikeru* instead of *kikeri* before the exclamatory particle *wo; inerayezukere* "(that is, I know why) I have been unable to sleep," with final exclamatory *-e* going with a *kösö* somewhat earlier in the same poem; and *kusa kösö sigëki* "luxuriant indeed the grasses," which can be analyzed either as a contingent *sigëki* "luxuriant," going with but displaced from *kusa* "grasses," or as a contingent form with *kösö,* in place of the indicative *sigësi* normally expected here in final position.

The opening passage of the *Taketori monogatari* has several of these discontinuous correlations going with the exclamatory *namu:*

ima wa mukashi, taketori no okina to yū mono arikeri. noyama ni majirite take o toritsutsu, yorozu no koto ni tsukaikeri. na o ba, sakaki no miyakko to namu iikeru. sono take no naka ni, moto hikaru take namu hitosuji arikeru.	A long time ago there was a person known as the old bamboo cutter. He gathered bamboo from the uncultivated slopes and used it for all sorts of things. His name was Sakaki Miyakko. Among the bamboo, there was one that shone at the roots.

Here the opening narrative sentences end in the perfective-durative *-ker-* plus the indicative morpheme *-i* except when an intervening *namu* calls for *-ker-* plus the contingent *-u,* thus *iikeru* "(name) was called" and *arikeru* "was." Other examples of this discontinuous correlation later in the same text involve *zo* < *sö*, and the later *nan* for *namu* and *namö*. It is also interesting to note that this entire type of discontinuous construction was unknown to the *kanbun* reading tradition for classical Chinese texts in Japan, probably because it was felt, quite rightly, to be a peculiarly Japanese syntactic pattern for which nothing in classical Chinese seemed to offer a close parallel.

The construction has continued to be imitated in the classical written language, but it had disappeared from the spoken language by the end of the Middle Japanese period. Even in Kamakura-period texts there is considerable evidence that the structure was no longer a living one and hence something about which the scribes were often uncertain. This shows itself in frequent wavering between forms in the manuscripts. Generally modern editors have "corrected" this to present as a result a rather neater version of the phenomenon than is shown in any individual manuscript tradition.

In the *Taketori monogatari* passage cited above, for example, all the manuscripts used in the meticulous 1957 edition of this text for the Iwanami series have *iikeru* going with *namu,* but in the next line immediately following the majority of the manuscripts including the main one on which the edition is based all have *arikeri.* Only a few relatively unimportant ones have the "correct" (and undoubtedly ancient) *arikeru.* The editors tell us quite frankly that they have selected this last reading even against the manuscript evidence because grammatically it "goes with" *namu.*

Sir George Sansom once concluded the preface to an early revision of his *Short Cultural History* with a reply to a "thoughtful reviewer" of an earlier version of the book, who had suggested that his treatment of Japanese history had neglected "those romantic or dramatic elements which would have invested it with the colour and music of a pageant." "Alas," Sir George wrote, "if that is what is needed, somebody else must write it, for I do not see history as a pageant but as a motley procession with some bright banners but many dingy emblems, marching out of step, and not very certain of its destination. Judged by such standards the history of Japan does not appear to me to be exceptional. . . . A survey of her whole history, despite its romantic and picturesque elements, leaves me with an impression of the frustration of her people and of that uneasy hold on evanescent glory which is the classic theme of their own monkish chroniclers." What the great and lamented British scholar of Japanese history and culture says here about Japanese history may, I think, be taken as equally valid, *mutatis mutandis* (and very little of it need be altered) for the language itself and particularly for the history of the language. Perhaps it would be possible to write about these subjects too in such a way as to invest them with the color and music of a pageant, but if that is what is sought, it is clearly for someone other than the linguist to do. The language and the history of Japan both have, to give them their due, undeniably romantic and picturesque elements, but to bring these into special prominence in any attempt at a comprehensive treatment would only be to play both the linguist and the historian false. Language not only has structure and history; any language itself is also an inseparable part of the structure and history of that society in which it occurs. It is an extremely special and highly specialized form of human behavior, and since it impinges upon our consciousness more strongly and more steadily than virtually any other aspect of human behavior, it is always particularly difficult to summarize or categorize—difficult, and perhaps pointless. But if the attempt is to be made at all, it would be difficult to do better than to borrow wholesale Sir George's final judgment: "a motley procession with some bright banners but many dingy emblems, marching out of step, and not very certain of its destination."

Notes

For full references to literature cited, see the Bibliography; the notes to each chapter cite both books and articles in the briefest way possible, generally by the author's family name, adding date of publication or a brief version of the title only where a single author has several titles in the Bibliography.

The single most useful guide for the non-Japanese student of the language to the enormous bibliography of Japanese language and linguistics studies is probably the K.B.S. *Bibliography*, an extremely useful tool in spite of its quaint and at times completely misleading English. Its selections represent a careful sifting of the fantastic bulk of the literature, and its information about editions, readings of authors' names, and other technical matters can save much time. Also useful is Yamagiwa, 1961; since both these tools will introduce the student to the Japanese bibliographies and to the bibliographies of bibliographies, no attempt has been made to cover these here. Tokyo University's *Kokugo kokubungaku kenkyū bunken mokuroku,* two volumes of which were published in 1965 (vol. 1 for 1963, vol. 2 for 1964), will, if continued, provide classified and indexed annual bibliographies of current work in the field. The article 'Nihongo' in Ichikawa and Hattori is useful for many reasons, not the least being its selective but extensive references to the literature down to 1955. I have used this article freely in almost every part of this book, and am greatly in debt to all its authors, but particularly to Ōno Susumu and Kindaichi Haruhiko. So great is my debt to this article, and particularly to those portions for which these two fine scholars are responsible, that in these notes I have in many cases not even attempted to acknowledge individual items but hope that this general statement here may serve instead.

Haguenauer is a vast but disordered source book, as useful for its copious references to the literature as for its content; I have used both to my advantage, but its lack of an index and of internal organization makes it difficult to use or to recommend to the student.

Of all the general works on the history of Japanese in Japanese I have found Doi *et al.*, 1947–1961, the single most useful book available to me, and I am also deeply in its debt. This most useful little handbook compresses an amazing amount of detailed and precise information into its short text, so that even if one does not always agree with its conclusions it is always possible to be perfectly clear about the nature of the evidence; unfortunately this last virtue is a rare one in the Japanese literature. The Kokugo gakkai's *Kokugogaku jiten* is useful both for its articles and for their bibliographical references; it presents the official "taught-in-the-schools" doctrine on many moot issues in Japanese language study, but is more important as a handy source on official doctrine than as a work of scholarly reference. Above all, Lewin's *Abriss* now provides us with an exhaustive account of the Japanese school grammar in all its richness of detail and over-elaboration; his meticulous references to the Japanese literature make it a useful bibliographical tool, as well as a handy key to the entire field of traditional Japanese language study. (Unfortunately Lewin's extremely valuable *Japanische Chrestomathie von der Nara-Zeit bis zur Edo-Zeit* (Wiesbaden, 2 vols., 1965) arrived too late to be used in the present book; it is an important contribution to the field that no student should overlook. With only a few exceptions, which have been noted as such, I have not been able to use literature which appeared or came to my attention after September, 1965.) Other general introductory works in Japanese which should be noted are Fukui, Andō, Hashimoto, HSCS 1; Tōjō, 1937, Tokieda, 1940, and Tokieda, 1941–1955, Fukui, 1942, and Yamada, 1943.

Kindaichi, 1957, and Sakuma, 1941 are widely appreciated and useful popular works.

For the history of the language in individual periods, the great series of detailed grammars of Yamada Yoshio still hold the field; in addition to his Nara period grammar, 1913, see also Saeki. Yamada's Heian grammar, 1913, may be supplemented with Doi, 1934. For Muromachi, see Yuzawa, 1929–1955, and for Tokugawa, Yuzawa, 1936–1955.

Most of the great Japanese dictionaries are of limited usefulness for linguistic study since in spite of their bulk they more often than not fail to identify or to date citations. Few attempt to give etymological information (apart from Chinese loanwords) in any systematic fashion, probably commendable caution in view of the present state of the knowledge of the field; an exception is the *Daigenkai* of Ōtsuki, which can always be counted on for attempts at etymologies, many of which are not above suspicion but all of which are interesting. Other essential lexicographic tools are the Heibonsha *Daijiten*, Ueda and Matsui's *Kokugo jiten*, Kindaichi's *Jikai* (perhaps the most useful of the one-volume Japanese-Japanese dictionaries, and a careful work of painstaking scholarship), Shinmura's *Kōjien*, and Morohashi, this last an amazing tribute to Japanese scholarly endurance as well as to the skill and devotion of the Japanese printer. Nakada, 1963, is a useful collection of non-current forms, distinguished by its author's customary fine scholarship and his careful citation of sources and passages, almost unheard of in works of this sort. For the pitch accent, Sanseidō, 1958.

Early texts and monographs in the field are reprinted in Kukui's *Taikei*, 1938–1944. For early literary texts the editions in the KBT are generally the best available and are edited with the best modern scholarship; this is particularly true of Ōno's *Man'yōshū* in this series, a monument of modern Japanese scholarship. A useful *Sakuin* to the KBT appeared in 1963, which makes it possible to locate many of the linguistic glosses to Old Japanese texts which appear in this series of editions, but unfortunately it is not part of the series proper and was never placed on public sale.

For Old Japanese poetry texts, KBT 3; for the *Fudoki*, KBT 2. The Ikeda *Genji monogatari taikei* has an index which makes it possible to use it for certain linguistic purposes; few early texts are as well edited or their manuscript evidence as easily available.

Komatsu is useful for archeology and physical anthropology but totally without linguistic value. Trewartha is reliable and always interesting. Tsunoda, de Bary, and Keene has useful samples of certain varieties of Japanese writing in the fields of traditional philosophy and religion in careful translations. Sansom, 1931–1946, is a basic item, never replaced, even by the author's own later works. Reischauer and Yamagiwa has accurate versions of several early texts. Brower and Miner is that rarity in the field, a book about Japanese literature which deals in literary terms and values; hence it is extremely valuable.

On early Japanese lexical sources, Bailey, 1960, Kazuma, 1955, and Karow, 1951.

1

Marco Polo quotation, Hildreth, 14–5. The best manuscript readings for the name of the country in Pelliot, no. 600, 608–9, *s.v.* çipingu. The account here of early Japanese history and culture draws upon Sanson and Tsunoda, de Bary, and Keene, particularly the latter for chronology; but many of the earlier dates in Japanese history are still open to question. Galvano, in Hildreth. On economic and physical geography and climate, Trewartha. Early man in Japan, Komatsu, Haguenauer. Malayo-Polynesian and Japanese, Izui, *Gengo kenkyū* 22/23.46–55 (1953). Jōmon and Yayoi cultures, J. Edward Kidder, *The Jōmon pottery of Japan*, Ascona, 1957; on the tumulus culture, his *Japan before Buddhism*, London, 1959. Quotation "The Japanese Archipelago . . . ," Trewartha, 122. Translations of the Chinese notices of early Japan, Tsunoda, de Bary, and Keene, and particularly Tsunoda and Goodrich, where however all transcriptions of Japanese forms are merely literal renderings of the traditional Tokugawa versions and generally without scientific value. Quotation from the *Hsin T'ang Shu*, Tsunoda and Goodrich, 40. On Chinese *chih* in *Man'yōgana* transcriptions, note however that Ōno, in a gloss to *Man'yōshū* 4046, KBT 4, suggests that *chih* is, contrary to Karlgren, to be reconstructed, with Tung T'ung-ho, as < **k̂i̯eg;* the graph for Old Japanese *ki* is not used in the *Man'yōshū* except for 18 cases in Book 18, which is in other respects also a somewhat exceptional section graphically. Ōno concludes that in the very earliest transcriptions the graph served well enough for Old Japanese *ki*, but that for the most of the *Man'yōshū* text the authors, aware of its shift in China to the affricate pronunciation *tś-*, avoided it. A final decision here involves a definitive conclusion on the Chinese data, which appears to be impossible at present. If we follow Karlgren, 864a, the word never had a velar initial.

On the many problems of the *Wei chih* notice of Japan, Hashimoto Zōkichi, especially part 1, chapter 11, 192–205 on the title. I have in general followed Hashimoto on the fantastically complex geographical problems presented by this text. On Middle Chinese *-ậi* equivalences with Old Japanese *o* and *ö*, Tōdō, 1960, 261. Cf. Haguenauer, 203. The word for "yes" in the *Wei chih* notice of Japan, Tsunoda and Goodrich, 13; Haguenauer, 256, 214, 267, 240 for the dialect forms. The definition of Old Japanese *tömö*, Sansom, 37. Pseudo-**Fimeko* in the *Hizen fudoki*, KBT 2, 394–7, cf. *ibid.*, 516–7, and Tsuchihashi and Konishi, in KBT 3, 231, note. Perhaps also the verb *hime-ru* "to keep something hidden" goes with these forms. The possible origin of the *tuậi* which transcribes Tsu-[shima] in *-s* for **tus-* has been suggested by E. G. Pulleyblank, 'The consonantal system of Old Chinese: Part II,' *AM* n.s. 9:2.218 (1962), with citations of the literature and a certain amount of supporting evidence. The long citation from the *Wei chih* notice of Japan, from Tsunoda and Goodrich, 10–3 and 16, with a few minor changes, apart from the linguistic forms. Romance data on words for "head," W. D. Elcock, *The Romance languages* (London, 1960), 155–6.

Other problems of the early notices in Ōmori, and with particular reference to the word *yamato*, in Ikada Tsutomu, *KGKB* 33:4.64 (1964), and Karow, 1963.

On *miminari*, note that the modern place name Miminari in Nara prefecture is nothing more than a modern equivalent (along consciously archaizing lines?) of ancient Miminashi, the form in which it appears in the *Nihon shoki*.

For a modern text involving *kashiwade*, Miller, 1962, 93. On burial mounds, Kidder, *Japan before Buddhism*, and on Haniwa, with particular reference to the arguments concerning human sacrifice in early Japan, see also the author's English version of Miki Fumio's *Haniwa* (1958) as *Haniwa: the clay sculpture of proto-historic Japan*, 1960.

On *itako* and *iduγan*, Haguenauer 168, 267, 230; Haguenauer's "Nobeči" (230) is presumably to be identified as Nobejimachi in Aomori, following the reading in Watanabe Akira, *Nihon chimei jiten* (1954) 1.326^b; on *iduγan* and its cognates, Dien. Illustrations of supposed Haniwa *itako* in Miki, Miller, *Haniwa*, plates 34, 63.

On the *kanbun* reading traditions, Tōdō, 1956, and especially Tōdō, 1960, are extremely valuable, in addition to being written in a very readable style. I have borrowed freely from them for examples, particularly in Chapter 3 below, and for many ideas throughout this book. On a *kanbun*-like reading tradition for Chinese texts in ancient languages of Central Asia, see the author's Ling-hu Te-fen, *Accounts of Western Nations in the history of the northern Chou dynasty, Chou shu 50,* 10^b–17^b, Chinese dynastic history translations, no. 6 (Berkeley, 1959), 22, fn. 33.

The text mentions only items of Japanese literature likely to be the source of significant linguistic citations, partly guided by the citations in Lewin. On the *senmyō*, Zachert. The text and translation of the *Bussokuseki no uta* in Mills are less useful than they might otherwise have been because the author treats the language as if it were modern Japanese, and also because of a garble in copying the text of poem 17; nevertheless it is still probably the most carefully edited text and translation available for Old Japanese. Pierson's massive text edition and translation of the *Man'yōshū* is now complete, but it can be used only with extreme caution, and must be consulted now only together with Ōno in KBT 4, 5, 6, 7. Especially troublesome for the linguist is Pierson's uncritical acceptance of most of the pseudo-antique readings of the Tokugawa philologists (*nu* for *no* "field" and the like), which Ōno (KBT 1.51–4) has shown to be totally without basis in fact or linguistic history, and from which his edition is mercifully free.

For the periods in the history of the Japanese language, *jōko nihongo* = Altjapanisch = Old Japanese, etc., I have tried to combine the most usual Japanese terminology with Lewin's, with the advantage of thus relating it to the customary equivalents in European languages.

Quotation characterizing the *Genji monogatari*, Sansom 89–90. For the *Kokinshū*, Florenz. The language of the *Konjaku monogatari*, Reischauer, 1947, 7. On the linguistic classification of *insei*, Doi *et al.*, 73 ff. The early Christian translations and books, Ebisawa, 1943 and 1960; Doi, 1942, 1955, 1960. Ps. 114 incident in J. Murdoch, *A his-*

tory of Japan (London, 3rd ptg., 1949), 2. The *Vocabulario*, Doi, 1960; the *Arte*, Doi, 1955. In *Nifon no Cotoba To Historia* the word *historia* is an early loanword which has not survived; today it would be instead the Chinese loanword *rekishi* "history." On fragments of early Roman Catholic Bible translations, Ebisawa, 1943. Yamagiwa, 1955, studies an important early missionary lexical source. Characterization of Kamo Chōmei, Sansom, 105; of Yoshida Kenkō, *ibid.* 108. Quotations from Lu Wen-chao and Yü yüeh, the author in *JAOS* 72.61, 64 (1952).

Tokugawa theater, Keene, Shively. Motoori on language and linguistics, McEwan, from whom the quotation is adapted. Fukuzawa's autobiography translated in Kiyooka; quotations adapted from 104–6 and 110–1; original text in Keiō University, ed., *Fukuzawa Yukichi zenshū* (1959), 7.

2

Hattori, 1959, summarizes and cites virtually all the earlier literature on the genetic relationship of Japanese; additional materials in Haguenauer's massive and uncritical treatment which however has the merit of registering virtually every suggestion for an etymology involving a Japanese word which has ever been made; but for the best evaluation of Haguenauer, see Hattori's *Keitōron*, 181, 183–90. Hattori, 1948, is still perhaps the only important study of the over-all problem in a Western language. Ōno, 1957, is an interesting if somewhat popular study, notable chiefly for its Korean comparisons, though now the definitive treatment of Japanese-Korean comparison in Martin, 1966, renders it of less importance. Many of Ōno's Korean comparisons are also introduced in his glosses to the KBT edition of the *Man'yōshū;* they are scattered and difficult to locate there, but always rewarding. Ōno, 1962, gives a somewhat misleading impression of this fine scholar's work, chiefly due to language difficulties in the English text, but contains valuable materials. Kindaichi, 1938, is a widely read treatment; Shinmura, 1935, an example of the older literature. Kanazawa, 1910 and 1929 (two versions of the same book), was until Martin, 1966, the source for most of the statements in the Western literature concerning the relationship of Japanese to Korean. Ramstedt, 1924, is a basic study; his 1942 essay also has valuable hints many of which have yet to be followed up. Unfortunately many of Ramstedt's Korean citations can only be used with extreme caution, particularly his glosses. Yoshitake, 1929, 'Auxiliary verbs,' and 1929, 'Particle *i*,' as well as Yoshitake, 1930, 1933, and 1940, illustrate an earlier school with relatively unquestioning acceptance of a great variety of "look-alike" correspondences involving Japanese and the languages of the continent, though Yoshitake's work was always on a high level for his day.

Comparative Altaic materials and proto-Altaic reconstructions in this chapter are from Poppe; his complete indices make it possible to verify them easily without further references and also to supplement the generally minimal citations of cognate forms included here. Old Turkish (Uiγur) citations (apart from Poppe) from A. von Gabain, *Altturkische Grammatik*, Leipzig, 1950. Common Tungusic reconstructions and Tungusic citations generally from Benzing.

Some of the theoretical and practical difficulties with "basic" vocabulary involving Japanese, Hattori, 1954. Japanese-Korean correspondences and proto-Korean-Japanese reconstructions, Martin, 1966; cf. also Doi *et al.*, 40–2 ,Ōno, 1957, 1962. Endoactive and exoactive verbs, Matsuo; comparative data involving **-i*, Doi *et al.*, 44 (partially rearranged and corrected for me by Samuel E. Martin). *tore*, *ni*, Doi *et al.*, 45. On the various possibilities of loanwords in and among cognate languages, cf. B. L. Whorf, 'Loanwords in ancient Mexico,' *SIL* 5.49–64, especially his "supercognates," 54–5. Old Japanese-Korean comparisons in material and technological cultural items, Ōno, 1957, 1962.

Korean and Altaic, Poppe. The most impressive recent argument questioning the entire Altaic hypothesis, Sinor, 1963. The genetic connections of Old Japanese *irö*, Murayama, 1962, whose argumentation and examples I have taken over here virtually intact. On *y* and *d*, also Haguenauer, 299. On correspondences involving Japanese *r* and *l* with Altaic, add to Murayama's data additional examples partly from Shibata in Ichikawa and Hattori, 631–2.

Correspondences involving proto-Altaic **ń-* : Altaic forms and reconstructions only (as throughout), Poppe; the quotation from Meillet, *Introduction à l'étude comparative des langues indo-européennes*^{8} (Paris, 1937), 32.

Altaic kin terms and Japanese in general, Haguenauer, 168 ff. (1) *-kara*, Doi *et al.*, 50. Cf. *man'yōshū* 220, gloss in KBT 4.122. (2) Doi *et al.*, 51. (3) in part, Murayama, 1963. (5) Mongolian *tomuγa*, Cleaves. On the Shōsō-in specimens and their history, *Shōsō-inten mokuroku*, Nara, 1964, with plates. (7) *seleme* and its related forms, L. Ligeti, 'Mots de civilisation de haute Asie,' *AO* 1.150 (1950); (8) Murayama, 1963. (9) Mongolian forms including ḥPhagas-pa for "yeast," H. Schurmann, *HJAS* 14.302 (1951). (11) *qutuγtu* and Japanese, Haguenauer, 362, 399. (12) *qayïq* and related forms, D. Sinor, 'On Water-Transport in Central Eurasia,' *Ural-Altaische Jahrbücher* 33.163–179 (1961). Achiki, *JAOS* 83:3.393 fn. 4 (1963).

On the techniques and assumptions of glottochronology / lexicostatistics, S. C. Gudschinsky, 612–23 in Hymes. With special reference to Japanese, Hattori, 1954, with an extensive bibliography of the literature; further and somewhat revised calculations in Hattori,1959, *passim*, particularly 94–8, 203–8, and 250–4, on which last the presentation here is largely based. See also Hymes, 1960, Thorpe cited in Smith, 1960, and Aoki, *IJAL* 27:4.358–60 (1961). Groot and Shinotō (i.e. Sinotô) data in Hattori, 1959, 96. International Christian University golf course dig carbon dating, personal communication from J. E. Kidder, September 25, 1964.

On Shuri, Chamberlain, 1895, and the quotation characterizing the vowels, *ibid.* 15; Iha; Groot; Hattori, 'On'in taikei' in 'Ryūkyūgo' in Ichikawa and Hattori (325 ff.), from which the comparisons with Tokyo are taken, and Kokuritsu kokugo kenkyūjo, KKKS 5, 1963, especially 27–86 on comparison with Tokyo. On the "age" of the Shuri vowels as against the Tokyo vowels, Hattori, 'On'in taikei' in Ichikawa and Hattori, 325, fn. 1. Pitch correspondences, *ibid.*, and KKKS 5, 55; cf. Hirayama, 1957, for an important attempt at correlating dialect data with the written records of early pitch systems, especially his 289 ff. and 181–259. *wo and *o* comparisons, Hattori, in Ichikawa and Hattori, 326. Hirayama, 1966, arrived too late to be used, but it is an important new source which must be taken into account in all future studies.

3

On the Sino-Japanese writing system and how it "works," Chamberlain, in either the original edition of 1899 or the somewhat expanded version of 1905, is always rewarding for the foreign student of the language, and delightfully written. The writing conventions of the modern language in Yamagiwa, 1948 and Miller, 1962. General introduction to the history of the writing system, Hayashi, 238–62 in 'Nihongo.' On the writing system in general, Yamada, 1937, Hashimoto, HSCS 3; Okai. On all aspects of the history of Chinese script and language in Japan I have made extensive use of Tōdō, 1956 and 1960. Specialized studies on problems of the *kana* syllabaries: Ōya, Yamada, 1929, 1938, Kieda, and in particular, Ōno, 1963, a magistral work also of considerable value below under phonology.

On the reading traditions for classical Chinese in Japan, Endō, Yamada, 1935, Ōtsubo; with particular reference to phonology, Iida.

The *on hakase*, Maspero. By "Middle Chinese" I mean throughout the *Ch'ieh-yün* language as reconstructed by B. Karlgren, his "Ancient Chinese"; similarly, my "Old Chinese" is his "Archaic Chinese." The designations adopted here bring these stages in the history of Chinese into closer parallel with more usual linguistic terminology in English, and help avoid the many misleading connotations of "ancient" and "archaic" in linguistic contexts. Properly all "Middle" and "Old" Chinese forms should be prefixed with *, since they are reconstructions, though of a complicated variety generously supported by a type of written records in the "rhyme tables." On the etymology of *kana* Haguenauer 336. *shan shang fu yu shan = id-u, Man'yōshū* no. 1787.

Korean employment of Chinese script, and examples, Vos, 1957, 1.137–8, 2.53, notes 101, 102, and 103.

The earliest known attempts to use the Chinese script for recording Japanese words phonetically in Japan (i.e., apart from the *Wei chih* and other Chinese texts) are 1) an inscription on a sword excavated in 1873 from the Funayama tumulus, a representative "square front, round back" site in Kumamoto prefecture, dating from the second half of the fifth century, on which the swordsmith's name is recorded phonetically in Chinese characters, in an inscription otherwise in Chinese; it appears to read *i-ta-*[*o* ? *ka* ?], perhaps some derivative from *i-ru* "to cast metal"; 2) an inscription on a metal mirror excavated from a tumulus in Wakayama prefecture and thought to date from the period 443–503, in which several Japanese words appear recorded phonetically in Chinese characters, again in an inscription otherwise in Chinese; these words include Old Japanese *sima* and *ösisaka,* on which last see Chapter 5 below. The first inscription records the name of the calligrapher responsible for its composition as Chang An, a Chinese or Korean. On these inscriptions, Mizuno and Kobayashi, 520–1, and Kayamoto, where they are his numbers 8 and 9, in order.

The "Six Dynasties" as a period and as mere *Zahlenspielerei,* O. Franke, *Geschichte des chinesischen Reiches* (Berlin, 1936), 2.116. *Go'on* and *kan'on* in early texts, Maspero. I have in general followed Tōdō, particularly Tōdō, 1960, on most of the many moot points concerning *go'on* and *kan'on*, including the significance of the terms themselves. On lexicographical ghosts in the *kan'on,* see also his *Chūgokugo on'iron,* 1957. For several years after the central government moved from

Kyoto to Edo there appears to have been confusion about how the Chinese characters used to write the new name for Edo were to be read; and Tokyo, which eventually won out, at first seemed to be losing ground to *Tōkei; cf. Wm. Elliot Griffis, writing on March 1, 1915 in *TASJ* 43:ii.293 (1915). Yüan Chin-ching and Dōshō, Tōdō, 1960, 260 ff. The account of the Tōsō'on is largely based on Tōdō, *loc. cit.* Grammatical differences between Chinese and Japanese, including many of the examples cited, Tōdō, 1960, 108 ff. Pleonastic *tokoro* surviving in modern Japanese, Miller, 1962, 78, 116 (though Vos, 1963, 384 and fn. 92 attempts to trace this construction to the influence of translations from the Dutch). The *Kojiki* I.18 quotation in Tōdō, 1960, 299–300, but slightly abbreviated; cf. the edition in Kanda Hideo and Ōta Yoshimaro, eds., *Nihon koten zenshū* (1962), original text, 219, Japanese translation, 217; English version in B. H. Chamberlain's *Translation of "Ko-ji-ki"* (Kobe, 1932), 72. The *monzenyomi:* Tōdō, *loc. cit.*; Bailey, 1960, 11. Development of the *kana* hands, Doi *et al.*, 75 ff. On the early lexical sources, *ibid.*, and Bailey, 1960, Karow, 1951, Hirayama, 1957, especially 181–259. "Lady Murasaki" on learning Chinese, Waley, vii; his own comment with the comparison to Gladstone and his daughters, *ibid.*, ix.

The 938 *hiragana* document, Doi *et al.*, 98. The 905 *hiragana* document is known to me only from a brief notice in the Tokyo *Mainichi shinbun* for Oct. 31, 1959.

Translation of the *iroha* poem, Chamberlain, 1905, 210–1. Dating, Ōya. The *siddhāṃ* script, and the phonetic glosses to the Daigoji text, *Bukkyō daijiten* (1955) 2.1937^a ff.; Gulik; and Mabuchi, 1962–3 on this and the entire subject of the influence of Indic linguistic science on Japan, both directly and via China. On Buddhist hybrid Sanskrit *ch* and often Pāli *ss* for *ts*, F. Edgerton, *Buddhist Hybrid Sanskrit Grammar* (New Haven, 1953), 2.18.

Hybrid text beginning "SUI SHIH CHIEN *na ka ni* . . . ," Doi *et al.*, 95. *Okurigana* rules, Kokuritsu kokugo Kenkyūjo,1952. The 1927 estimates on newspaper type stocks and the "educated reader," Arthur Rose-Innes' *Beginners' dictionary of Chinese-Japanese characters* . . . (Cambridge, 1942 reprint of 2nd enlarged ed. of 1927), i–ii. Ueda's *Daijiten* had 14,924; Morohashi has 48,902. On *furigana*, also *rubi*(*i*), Miller, 1962, 39. Post-World War II script "reforms" and limitations, Yamagiwa, 1948; the quotation on a totally romanized orthography for the future, *ibid.*, 47. A list of the most important *shinjitai*, Miller, 1962, 133–4. Varieties of language,. Martin, 1954, Yamagiwa, 1942. Statistics on survival of older inflected forms, Yamagiwa, 1948, 46, citing Yamagiwa, 1942 (not seen).

4

Dialect bibliography with an accurate critique of the bulk of the literature, still by and large valid despite the passage of a decade and a half, Brower, 1950; also, Haguenauer, *passim*. Kindaichi, 212–38 in 'Nihongo' is of exceptional value and interest, and I have drawn heavily from it for this chapter, including many of the examples cited; it has copious citations of the literature, to which it serves as selective guide. His article 'Hōgen' in the Heibon-sha *Sekai daihyakka jiten* (1958) 26.252–8 is also valuable, particularly for its detailed maps.

Important general works: Tōjō, 1944, 1954; Fujiwara, 1949, 1956; Kobayashi 1950; Shibata, 1958; Kokuritsu kokugo kenkyūjo, KKKH 16; Nihon hōgen kenkyūkai, 1964. Dictionaries and other lexical tools: Tōjō, 1951 (in which the 'Hōgen gaisetsu' section, 863–81 is of particular value); Tachibana, n.d.; lexical works with particular reference to the system of distinctive pitch contrasts: Hirayama, 1957, 1960; Hattori, 1933; Nihon hōgen gakkai, 1934; Nihon hōsō kyōkai, 1950; Terakawa, Kindaichi, and Inagaki, 1951; Terakawa, 1963 (the perplexing English in which this is written renders parts of it obscure, but the map is good).

Useful works on individual local dialects or areas: Schwartz; Miyanaga, 1930; Ogura; Nakamura; Kobayashi, 1944; Kokuritsu kokugo kenkyūjo, KKKH 1; KKKH 5; Matsumura, 1957. Representative works on limited problems involving the dialects: Yanagita, 1930–43, 1942; Shibusawa.

The ancient dialects: Fukuda, 1965, now the definitive work, but received too late to be used; Karow, 1943; Fukuda, 1954 (not seen, and known to me only through the citation and extracts in Haguenauer, 640); Fududa, 1962; Doi *et al.*, 67; Ōno, 'Azumakuni no hōgen ni tsuite,' in KBT 6, 31–9.

Distribution and statistical data, partly after Kindaichi, 'Bunpu' in 'Nihongo.' Ainu, Hattori, 1964, from which all Ainu citations in this book are taken. Beginnings of Japanese dialect study, Brower, 1950. On the implications of Yanagita's "snail" study, cf. K.B.S. *Bibliography* #165. The vocabulary (321 ff.) in KKKH 1, for example, is in *kana!* Isogloss summary *kakeru* etc., Kindaichi in 'Nihongo,' 212–3. Eastern Japan isoglosses, *ibid.*, 214. This same article has been utilized extensively for the materials following; since it gives precise references to the sources, I have not attempted to indicate most of these here. Pre-nasalization and insertion of syllabic nasal, Haguenauer, 202, 206. Pitch comparison lists, Kindaichi in 'Nihongo,' 225–6. Table with *kendo*, etc., *ibid.*, 234.

Man'yōshū 3476, also in Yokoyama, 83–4. Ryūkyū cognates for Eastern Old Japanese *wanu*, Martin, 1966; traditional exegesis in Ōno, KBT 6, 31–9. Cf. KBT gloss to *Man'yōshū* 3565, and gloss 897 in KBT 5. Ancient dialect boundaries, Fukuda, 1962; Ōno in KBT 6, 31–9. The form *kekere* = *kokoro* in *Kokinshū* #1097, Doi *et al.*, 69; Florenz, *Wörterbuch* 62; Fukuda, 1965, 330–31; text in KBT 8.329, and cf. *Tosa nikki* 2/11. Dōtaku finds and their extent, Kidder, *Japan before Buddhism*, 119 ff. Other important non-linguistic correlations in Ōno, KBT 6, 31–9, and Doi *et al.*, 66 ff. Yokoyama on the non-standard language poems of the *Man'yōshū* is unfortunately no longer usable; see instead Ōno in KBT 6, *loc. cit.* On the *fudoki*, Karow, 1943. Malayo-Polynesian reconstructions and citations, O. Dempwolff, *Vergleichende Lautlehre der austronesischen Wortschatzes* (Berlin, 3vs., 1938) 3.115; 3.70; Ainu forms and meanings, Hattori, 1964, *s.v.* On Ainu loans in Japanese, cf. Haruo Aoki's abstract of Hattori in *IJAL* 27.358–60 (1961), from *Minzokugaku kenkyū* 24.21–66 (1960).

5

On phonology in general, and historical phonology in particular, Hattori, 'On'in,' 153–60 and Ōno, 'Rekishi,' 262–85 in 'Nihongo' are exceedingly valuable, and I have used both extensively in this chapter. The relevant portions of Doi *et al.* are also rich in phonological materials. In Western languages there is some literature of value, notably Pletner and Wenck, this last a definitive study the review of which, Martin, 1959, should not be overlooked. All of Yoshitake's articles and his 1934 book are valuable but must be used with caution. Rahder, 1940, 'Phonetic variation,' and 1940, 'Initial syllables' have *inter alia* useful data for historical phonology and internal reconstruction.

Important general works in Japanese include Arisaka, 1940, 1944, revised and expanded, 1957, 1955; Hashimoto, HSCS 4, HSCS 5; Hattori, 1951; Sakuma, 1919, 1929; Kindaichi, 1932, revised 1938; Jinbō, 1947.

The inspection of written records: Pletner; Pierson, 3.130, 4.377–96; Pagel, Haguenauer. The Chinese materials, Maspero; Chao; Tōdō, 1957; Martin, 1953, Matake. Ishizuka's dates from Izui. Chao quotation, 213. Cf. Martin, 1953, 23 ff.; Tōdō, 1957, 186 ff. Pronunciation of the eight vowels, Hattori, 1948, 131 fn. 57; Wenck, 4.15. Mabūchi, 1957 and 1959 are particularly important since they demonstrate at least a few necessary corrections to the interpretations of the written records as generally presented in the literature.

Chronology of sound change in Old Japanese, Doi *et al.*, especially the chart on 118.

The comparative method and non-Indo-European languages, Bloomfield, 1925; Hockett, 1948; Hattori, 1948; Hattori 318–28 in 'Ryūkyūgo' in Hattori and Ichikawa; Schwartz, *TASJ* 1915. Dialects without pitch contrasts, Hirayama, 1960, 16 ff. The correspondences between Tokyo and Satsuma and their implications for Japanese historical phonology are also treated in Miller, 1964. Internal reconstruction, Hoenigswald; Marchand (this last particularly applicable to the Japanese problem here presented). Motoori on *oi* and *oyu*, McEwan. Quotation from Martin on morphologically-determined allomorphs, Martin, 1952, 85. Cf. Haguenauer, 217 ff. Marchand's requirements for internal reconstruction, 246–7, 253. Dating use of bit in Japan, personal communication, J. Edward Kidder, February, 1962. Examples of relevant vowel alternations, Martin, 1952, 85 ff.; Haguenauer, 217 ff. (with additions). Cf. Ōno, KBT 4, 472, supplementary note 2861 to no. 2861, and 261; Mongol *široi* etc., Poppe, 60, 114, 30. Murayama, 1954, is also important.

On the comparative implications of *ki*, Ramstedt, 1924, 46 (who appears to have been the first to note this), and Yoshitake, 'Particle *i*,' 1929, 894, citing Ramstedt; on *saki* / *sachi*, Karow, 1943, 164. Shuri : Tokyo comparisons, Hattori, 'Ryūkyūgo' in Ichikawa and Hattori. Periodization of early stages of Japanese, Ōno in 'Nihongo,' 268–71; Thorp in Smith, 1960. Developments of earlier [*p] in Japanese, Martin, 1959; Haguenauer, 356.

Sound system of Old Japanese, generally accepted doctrine in Ōno in 'Nihongo,' 266, but now to be modified according to Mabuchi, 1957. On /s/ in *Farusamë*, cf. materials in Mabuchi, 1959, reprinted in Mabuchi, 1962–3. The introduction of *p*, Martin, 1959. Structural limitations on the Old Japanese vowels, Ōno in 'Nihongo,' 270–1; Izui. The morphophonemic replacements of vowels, Ōno, KBT 4, 269. Ablaut relationships within Old Japanese, Izui; Ōno in KBT 4, 331, and 365–6; *sVs* > *ss* assimilations, Ōno, KBT 4, 354. Consonantal ablaut variations, Haguenauer 227, 168, 302, 304; Ōno, KBT 4, 64; Pagel, 348; Miller, 1962, 122. Document of period 810–823, the *Rei'iki* from the Yakushiji, Doi *et al.*, 106. *Ibid.*, ff., for the chronology of the sound shifts from Old to Middle Japanese. [kaφa], [iφe], *ibid.*, 114. The pun on *yamaFi*, *ibid.*, 116. Lengthened forms *kaa*, etc., *ibid.*, 119. Voicing in Old Japanese, Ōno, 'Nara jidai no seion, dakuon ni tsuite,' KBT 6, 42–6; Hamada.

Sound system of the early 10th century, Ōno in 'Nihongo,' 271 ff. For a summary of the traditional varieties of *onbin*, *Daigenkai* 1.537^{b-c}; a more modern approach in Vos, 1957, 1.27–31, 2.15.

Chinese *kung* "achievement" in *Man'yōshū*, no. 3858.

Old Japanese loan versions of Chinese *-n*, Maspero; Kamei, 1954 (who cites them only to deny the process!); cf. Ōno, KBT 6.328, 105, on Chinese *t͡iwong* = *sigu*[*re*]. Earliest citations for syllabic nasal, Doi *et al.*, 133, Wenck 4.272. The *Hou-lin yü-lu* materials, Hamada (with citations of other literature). Etymology of *fude*, Yoshitake, 1930. Other early Chinese transcriptions, Hamada. Manchu data, C. de Harlez, *Manuel de la langue mandchoue* (Paris, 1884), 20–1; Poppe, 24, 27; Chuvash from John R. Krueger, *Chuvash manual* (1961), and *UAS* 13.138 (1962). Materials on the development of the Japanese syllabic nasal, including the relation of the phenomenon to pre-nasalization and voicing: Ramstedt, 1942; Asayama. Cf. also Pagel, 354.

Arbitrary voicing of *su*, *suru* following Chinese loanwords, Martin, 1952, 49 ff.; correlation in historical terms with pitch contrasts, Tōdō, 1960, 242. Back-formation *jiru*, Martin, 1952, 52. Sendai nasalization, Ogura; Haguenauer, 202, 206. Tosa dialect data in Asayama. T'ang pre-nasalization, Maspero. Ōno's glosses to the *Man'yōshū* contain *inter alia* important information on the development of the syllabic nasal in individual lexical items; since KBT 4, 5, 6, 7 have no index or other way of locating these items, the following list may be useful (all references to KBT *Man'yōshū*): 4.22, 4.78, 4.79, 4.98, 4.154, 4.163 (2), 4.170, 4.174, 4.184, 4.205, 4.264, 4.305, 5.182, 5.295, 5.378, 6.175, 6.204, 6.265, 6.310, 6.343, 6.356, 6.389, 6.429, 7.106, 7.133, 7.179, 7.267, 7.306, 7.409, 7.413, 7.417, 7.429, 7.439, 7.455, 7.456.

Middle Japanese, Ōno in 'Nihongo,' 273 ff.; Doi *et al.*, 140 ff. Shifts of *eu* and *eo* in native Japanese lexical items, Haguenauer, 232. Modern Tokyo *ae* and *ai*, Martin, 1959. Phonemes of modern Japanese, Bloch, 1950. Various phonemic solutions for modern Japanese, Martin, 1959. Sample pitch data, Hirayama, 1960, *passim*.

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General and encyclopedic works on loanword elements in the Japanese lexicon include Ueda *et al.*, 1915; Yanagita, 1936; Arakawa, 1941; Monbushō, 1955; Yamada, 1940; Takamine, 1944. Most modern Japanese lexical compilations attempt to note loanword etymologies, but it is always dangerous to rely on them uncritically, since many include identifications with "ghost" items expressly and solely generated for the purpose.

On Chinese, Sanetō, and Kumano and Sawamura; Kanei, 1954 on the older layer of Chinese loans, taking Karlgren's original list as his point of departure, useful for its materials but its thesis is somewhat obscured by the English in which it is written; *ima meku,* Sansom, 1952, 356. Quadri-grade T'ang official titles in Japanese, Sansom, 1932, 101–3.

"Spelling pronunciation" in *bateren,* Doi *et al.*, 178. On Dutch in Japanese we are now well served by Vos, 1963; similar comprehensive monographs are badly needed for each European language. Dutch *orgel* vs. English "old gold," J. M. Flagler, *The New Yorker* 40:22.71 (July 18, 1964). On the Romance languages, Knowlton, who treats in some way or other the surprisingly large total of 325 Japanese lexical items.

I think I originally owe my interest in what I have called the principle of "total availability" to conversations with my colleague Samuel E. Martin. Statistics on Chinese loanwords in early texts, Tōdō, 1960, 249, after Okai Shingo. "Japanese words coined in Japan from Chinese morphemes," just as in English the term *wenli* "should best be regarded as an English word derived from Chinese roots," Y. R. Chao, *Cantonese Primer* (Cambridge, 1947), 6, fn. 4. "Geometry" and *kikagaku,* Kumano and Sawamura.

Ichikawa in 1928 in Mencken, 1955, 591. Edward Seidensticker thoughtfully supplied me with a long-awaited citation of *onnaboi,* in a personal communication dated Palo Alto, December 2, 1963: *Nagai Kafū zenshū* 14.199 (Chūō kōron ed.); he added that the text made it "quite clear that the word was fashionable at about the time of the first World War." Phonology of English loans in Japanese, Ichikawa, 1930; Bloch, 1950 ("innovating dialect"); Miller, 1962, 30 ff.; Martin, 1959. Cf. Emerson Chapin, *New York Times,* March 7, 1965.

ikari, Lévi. On *maro,* cf. E. Herzfeld, *Zoroaster and his world* (Princeton, 1947) and S. Wikander, *Der Arische Mannerbund* (Lund, 1938), 110–111, cited by R. N. Frye, *HJAS* 10.447 (1947).

On Japanese words in English, Gattenby, 1931, 1934, plus dated citations *s.v.* in the OED; Mencken, 1955, 691–3, 188 (on "hobo"), 373; 1952, 607 (on "skibby"), 438; on the "soy" problem, cf. K. B. Harder, 'The pronunciation of "soy,"' *AS* 31.77–9 (1956); the "ginkgo" puzzle in *TP* 33.193–219 (1937); on *moxa* Urban T. Holmes, *Lg.* 10.283 (1934) is to be disregarded in view of Pelliot, *TP* 32.78 (1936).

Japanese loans in Chinese, Sanetō; English "club" > Japanese *kurabu* > Chinese *chü-le-pu,* and its specialized sense in Chinese, J. Chesneaux, 'Les termes relatifs aux organisations ouvrières pendant la phase initiale du mouvement ouvrier chinois (1911–1927),' *Trudy dvadtsat' pyatogo meždunarodnogo kongressa vostokovedov Moskva* 5.63–5 (1963). Japanese linguistic survivals in Micronesia, E. J. Kahn, Jr., *New Yorker* 42:16.93 (June 11, 1966).

Post-World War II linguistic contacts between English and Japanese: Norman, 1954, 1955; Algeo, 1960; Webster, 1960. These four papers contain valuable materials, but must be used with caution; their authors are uniformly innocent of even the most elementary facts of Japanese linguistic history and philology. Norman, 1955, 47, and Algeo, 1960, 119 and 121 both make the amazingly naive assumption that the term *shakuhachi* "a [1] *shaku* and 8 [*sun* long] bamboo musical instrument" and its usage in the sense of "fellatio" are somehow recent American inventions; Norman, 1955, 48 speaks of "the transmogrification (sic) of *shakuhachi*" as "a prime example of Army linguistic roguery," whatever that may mean. The faith of these authors in American originality in such matters is touching but here at least misplaced. Umegaki, 1956, 207 cites the term in this sense from Edo literature (he adds, quaintly, that it is "vulgar"!).

The "Yokohama dialect" in [*Revised and Enlarged edition of*] *Exercises in the Yokohama Dialect. Twenty Second Thousandth. Revised and corrected at the special request of the author by the Bishop of Homoco*, Yokohama, 1879, in at least several ephemeral reprintings and piratings, all n.d., n.p.; the extract is from 25–6 in a reprint that appears to be Tokyo, ca. 1950. It is studied in Daniels.

'Preble's law and other matters,' Charles Frankel in *The New Yorker,* 39:14.103 (May 25, 1963). Golovnin on Japanese pronunciation, Hildreth, 555, fn. The text of H.I.H. Mikasa's poem in all major Tokyo dailies for January 12, 1965; the article on the use of Japanese at the Olympics, the Tokyo *Mainichi,* October 4, 1964.

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Bloomfield, 1933, 21–2.

Martin, 1964 is the best and only comprehensive treatment of the the levels of speech phenomenon, and I have leaned heavily upon it in this chapter; its bibliography is also extremely helpful. Useful Japanese works on the subject include Yamada, 1931 and Kindaichi, 1959. Yamagiwa, 1965 arrived too late to be of use in writing the chapter, but 204–9 deals with levels of speech. Figure showing "Operation of the Donatory Verbs" adapted from Miyaji in *Gengo seikatsu* 70.30 (1957); the entire issue of the journal is of interest. Kinship terms, Befu and Norbeck. The suffix //-wuto //, Martin, 1952, 87. On the deferential prefix *o-*, Shibata, 1957. Classified "basic" vocabulary, Doi Kōchi, 333–7. Statistics on use of deferential prefix, Shibata, *loc. cit.*, 45, Fig. 8. Quotation from Martin, 1964, 411. "Consciousness" study, KKKH 11. Conclusions of this study, Martin, 1964, 411–2; KKKH 11, 376–8. *Kore kara no keigo,* Martin, 1964, 412; Miyake. The troubles of the JAL stewardess in ' "O-kyaku-sama" ni wa donna kotoba o tsukau ka,' *Gengo seikatsu* 82.2–14 (1958), especially 11, on the difficulty of "smiling when you say *gozaimasu.*" Women's speech, Mashimo; the text cited, KKKH 11, 178. Verbal responses to telegraph situation, KKKH 11, 400–3. Quotation beginning "In Japan, there are at least half a dozen ways of saying 'I' . . . ," Charles Frankel, *The New Yorker* 39:14.103 (May 25, 1963).

The *kuchijamisen,* Malm, 62–3. Impressionistic sound symbolism, Lewin, 66; Martin, 1952, 65. The Ise taboo system, Tsuboi. The *makura kotoba,* Dickens. On all the special language devices used in traditional literature I have drawn heavily upon the information in Brower and Miner, 1961; Reischauer, 1947; Shively, 1953; and Keene, 1961; of these, Shively 42 ff. gives the most valuable data on the literary employment of linguistic materials, and I am in debt to him both for general information and for all the Chikamatsu citations in this chapter. Also of great interest in this connection is Donald Keene, 1964, from which (7) I have taken both his translation and his exegesis of the extract from the *Heike monogatari;* the text is in KBT 33 (1960), 430–1. This is also the source (9) of his *Hanjo* translation and exegesis; the text is in KBT 40 (1960), 347, where the commentary has also been useful. Another striking example of alliteration, *Man'yōshū* 1018.

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On grammar, Bloch, 'Inflection,' 'Syntax,' and 'Derivation,' all 1946, are basic; his work has been carried on by his students: Martin, 1952; Jorden, 1955 (cf. the review in *JAOS* 76.37–40 [1956]); it is also the basic analysis underlying such instructional materials as Martin, 1954, and Jorden, 1962–3, which are also to be consulted. Not in the same tradition but also useful are Yamagiwa, 1942; Henderson, 1943.

On the written language, Lehmann and Faust; Gardner, 1950, and Gardner, 1954, are more closely both related to Bloch's work. Yamagiwa, 1942 (not seen), traces survivals of the older written language in modern texts.

For the traditional Japanese approach to all aspects of grammar, still largely unaffected by the findings and attitudes of modern linguistics, Lewin is an exhaustive and accurate guide, as useful for its meticulous citations of the literature as for its painstaking retelling of the intricacies of Japanese school grammar. Kindaichi, 'Bunpō,' 160–200 in 'Nihongo' is a good introduction to the same thing in Japanese, but probably the least useful portion of that otherwise valuable article. Representative Japanese works include Yamada, 1908; HSCS 2, HSCS 7; Tokieda, 1950–54; Sakuma, 1936, revised 1951; 1951.

Useful studies on individual problems: KKKH 3, Kokuritsu kokugo kenkyūjo, 1960; Ishigaki, 1955. European origins of Japanese grammatical terms, Ida.

For historical syntax Kolpakči is probably the most useful work outside of the Japanese literature; Sansom, 1928 is always rewarding reading but is neither "historical" nor a "grammar" in any of the usual senses of these words. The analysis in Yokoyama, 1950, is still essentially valid, and I have used it throughout this chapter; its chief difficulty is the neglect of phonology already mentioned, and the fact that in several instances more recent textual and exegetical work has made facts available that were not at the author's disposal 15 years ago. Ōno, 'Bunpōshi' in 'Nihongo,' 275–283, is extremely useful for all aspects of historical morphology and syntax.

Fujitani, ed. in Nakada and Takeoka, 1960; passage cited on *yori*, 247 ff.; on *ku*, 306. The *Life of St. Neot* in Georgina Battiscombe, *John Keble, A study in limitations* (New York, 1964), 245. On *no*, Lewin, 75, for an introduction to the traditional literature. In the account here of the word classes of Japanese, my debt to the work of Bloch and his students will be obvious, and I have not attempted to document individual items.

For internal reconstruction of the verbal inflections I have been much enlightened by Ōno, 1953, and his own later version of these same ideas in 'Nihongo,' 277 ff., which is also the source for several other items in this chapter; but my analysis and conclusions differ somewhat from his. For the inflection of the classical verb system, Gardner, 1950, and particularly Gardner, 1954, have been useful. For the traditional verb system and terminology, Lewin, 104 ff.; for a harmony of the results of description with the traditional system, Yokoyama, 87–94. *-t-* and *-n-* in *Man'yōshū* nos. 1819 and 3655, Yokoyama, 26–7, but I follow more recent exegesis to come to a somewhat different result. The *Kojiki* passage, Asahi shinbunsha ed., 178; cf. Sansom, 1928, 19.

History of the copula, Lewin, 143. The numerals, *ibid.*, 57 ff. and for Old Japanese, Ōno in 'Nihongo,' 276. Tungusic numerals, Benzig 1049 ff. Comparative data for the particles, Murayama, 1957. Morphophonemics, Martin, 1952. Old Japanese "pronouns," Ōno in 'Nihongo,' 275. Lists of forms for speaker and person`spoken to, Lewin, 53. Etymology of *watakushi*, Martin, 1966.

The text for syntactic analysis, from the Tokyo *Mainichi shinbun*, evening edition, January 23, 1965, in the column "Yūrakuchō." Bloch's system of syntactic formulas, Bloch, 1947. On the differences between syntax and morphology, Bloch, 'Syntax,' 1946, 205; cf. in *ibid.*, 211 fn. 21, "the scope of *-rashii*."

The *kakari musubi* construction: Lewin, 218–20; Yokoyama, 35, 37; Ōno, ' "koso" no kakari musubi,' in KBT 5.38–41. The *Taketori* passage in KBT 9 (1957); cf. *ibid.*, 'Bunshō kōzō ni tsuite," 12–8, which has a listing (14) of typical *kakari musubi* constructions in this text. Translation in Keene, 1956.

Sansom's epitome of Japanese history, vii in the New York, 1943 revision of the 1st edition of 1931.

Bibliography

A complete or even a comprehensive listing of the Japanese literature on the history and structure of the Japanese language would be an enormous undertaking, far beyond the scope of this volume. The following bibliography is instead a highly selective listing of only the most important literature in the field, particularly that to which reference is made in the text and notes or which has been particularly useful in the preparation of this book. In the case of works concerning Japanese in European languages the quantity of the literature is small enough so that it has been possible to be somewhat less selective. These citations have also been kept to a minimum by omitting language-instruction texts except in those cases where it was felt that they contain useful information about the structure of the language apart from their purely pedagogical contents.

The language of the title of each bibliographical citation is the language in which that article or book is written. Translations in parentheses have been provided for all Japanese titles, but their aim is identification of contents rather than literary elegance or even strict linguistic accuracy. Hence *akusento* has been uniformly rendered "accent," *joshi* "auxiliary," etc. The text of the book makes clear what these technical terms actually mean, which has made it unnecessary to clutter up the translations in the bibliography with additional explanations. Sometimes modern Japanese monographs and even periodical articles carry English titles intended to be descriptive of their contents. Since librarians and others often use these "original" English titles for indexing and reference purposes they have been included in the bibliography where they have been given immediately following the romanized Japanese title. Unfortunately some of these "original" English titles are so badly done that they are neither understandable as English nor do they give any real idea of the content of the citation. In such cases additional translations of the titles, for which the author is responsible, are given in parentheses following the romanized Japanese titles and the "original" English version.

The place of publication of all items is Tokyo unless otherwise stated.

The following abbreviations have been used for serials and series:

AM = *Asia Major* (London).
AS = *American Speech.*
BEFEO = *Bulletin de l'école français d'extrême-orient* (Hanoi).
BSO[A]S = *Bulletin of the School of Oriental* [*and African*] *Studies* (London).
CAJ = *Central Asiatic Journal* (Wiesbaden).
HJAS = *Harvard Journal of Asiatic Studies* (Cambridge).
HSCS = Hashimoto Shinkichi hakase chosakushū (Collected works of Dr. Hashimoto Shinkichi).
JAOS = *Journal of the American Oriental Society* (New Haven).
KBT = [Iwanami] Nihon koten bungaku taikei ([Iwanami edition] Corpus of Japanese classical literature).
KGG = *Kokugogaku* (The study of Japanese).
KGKB = *Kokugo kokubun* (Japanese language, Japanese literature).

KGtKBG = *Kokugo to kokubungaku* (Japanese language and Japanese literature).

KKKH = Kokuritsu kokugo kenkyūjo hōkoku (Reports of the National Institute for the Study of Japanese).

KKKS = Kokuritsu kokugo kenkyūjo shiryōshū (Collections of source materials of the National Institute for the Study of Japanese).

Lg. = *Language* (Baltimore).

MN = *Monumenta Nipponica* (Tokyo).

'Nihongo' = the article 'Nihongo (Japanese language),' 149–305 in Ichikawa Sanki and Hattori Shirō, eds., *Sekai gengo gaisetsu*, *An Introduction to the languages of the world*, vol. 2, 1955 [with sections written by Hattori Shirō, Kindaichi Haruhiko, Hayashi Ōki, and Ōno Susumu].

SIL = *Studies in Linguistics*.

TASJ = *Transactions of the Asiatic Society of Japan* (Tokyo).

TP = *T'oung Pao* (Leiden).

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Indexes

The Word Indexes list all forms cited in the text, but in order to reduce their bulk not all derived or secondary forms nor all closely parallel forms from cognate languages have been registered, in cases where listing only one such form still makes it possible to locate the others easily. Morphological layers in Japanese have not been given (*o-cha* appearing as *ocha, ik-i-mas-u* as *ikimasu*) even when noted in the passage to which reference is made. Ryūkyū, Satsuma, and other non-standard Japanese forms are in general indexed only by listing their standard language equivalents under Modern Japanese. Chinese and Japanese script has been given in the Word Indexes only when of particular linguistic interest or importance, or when necessary for the identification of forms (thus, particularly for homophonous forms, for Old Japanese *man'yōgana* writings, and for all Chinese forms and loans from Chinese); in the Subject Index it has been included only for the identification of words, names, and book titles of particular relevance to the subject. For the script equivalents of other words and other entries in the Subject Index the usual lexical and reference works may be consulted; for authors and titles in the Notes and Bibliography the K.B.S. *Bibliography* will be especially useful. The order of all indexes is that of the English alphabet.

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PLATES

PLATE 1

The *Bussokuseki no uta* inscription.

Old Japanese, *ca.* A.D 753 (see text, p. 32–33).

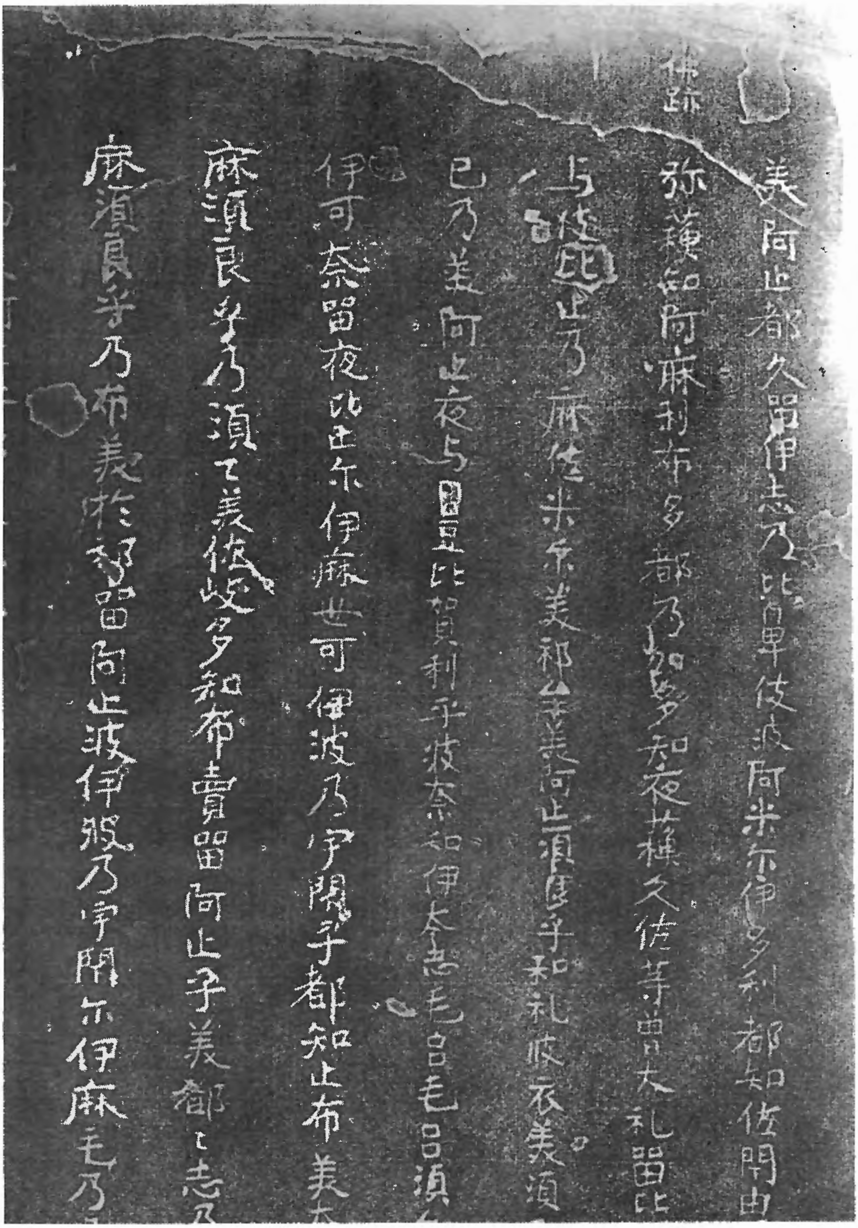
Ink rubbing of the incised inscription, made by tightly pressing a sheet of paper on the stone and rubbing over its surface with Chinese ink.

The illustration shows the upper part of the first seven poems on the stone; the first two (beginning in the upper right-hand corner) read in transcription:

[1] *miatö tukuru / isi nö Fibiki Fa / amë ni itari / tuti saFë yu*[. . .
[2] *misoti amari / Futatu nö katati / yasokusa tö / södareru Fi*[. . .

The text is written entirely in Chinese characters used as phonograms (*man'yōgana*), though the phonetic values for a few of the graphs are based on their Japanese semantic equivalents rather than on their pronunciation in Chinese (thus Old Japanese *tö* is written with Chinese *chih* "stop, cease" on the basis of Old Japanese *töm-u* "stop, cease"). The script is clearly and regularly written, with no cursive forms; aesthetically the calligraphy is reminiscent of the Wei dynasty, Six Dynasties, and Nara-period Buddhist art with which it is contemporaneous. Since there has been no opportunity for scribal confusion or errors during a long period of textual transmission, the inscription is a priceless document, particularly for the study of Old Japanese phonology. Two examples may be cited: in the second poem Old Japanese *misoti amari Futatu* "thirty-two" is preserved in an early form with unvoiced *-t-* in *misoti;* later texts including a variant version of this same poem in the eleventh-century anthology *Shūi Wakashū* have this word with secondary voicing as *misodi.* The same poem also preserves the rare form *södareru* "be complete with, be fitted out with" which shows a *-d-* dialect version of a form which otherwise in Old Japanese (and later generally) has *-n-*, cf. modern *sonae-ru.*

Rubbing from the original stone *in situ* in the precincts of the Yakushiji, Nara, author's collection.



美阿止都久留伊志乃比鼻伎波阿米尓伊多利都知佐閇由

佛跡

弥蘇知阿麻利布多都乃加多知夜蘇久佐等曽太礼留比

与伎比止乃麻佐米尓美祁牟美阿止須良乎和礼波衣美須

己乃美阿止夜与呂豆比賀利乎波奈知伊太志毛呂毛呂須

伊可奈留夜比止尓伊麻世可伊波乃宇閇乎都知止布美

麻須良乎乃須々美佐岐多知布賣留阿止乎美都々志乃

麻須良乎乃布美於祁留阿止波伊波乃宇閇尓伊麻毛乃

PLATE 1
The *Bussokuseki no uta* inscription.

PLATE 2

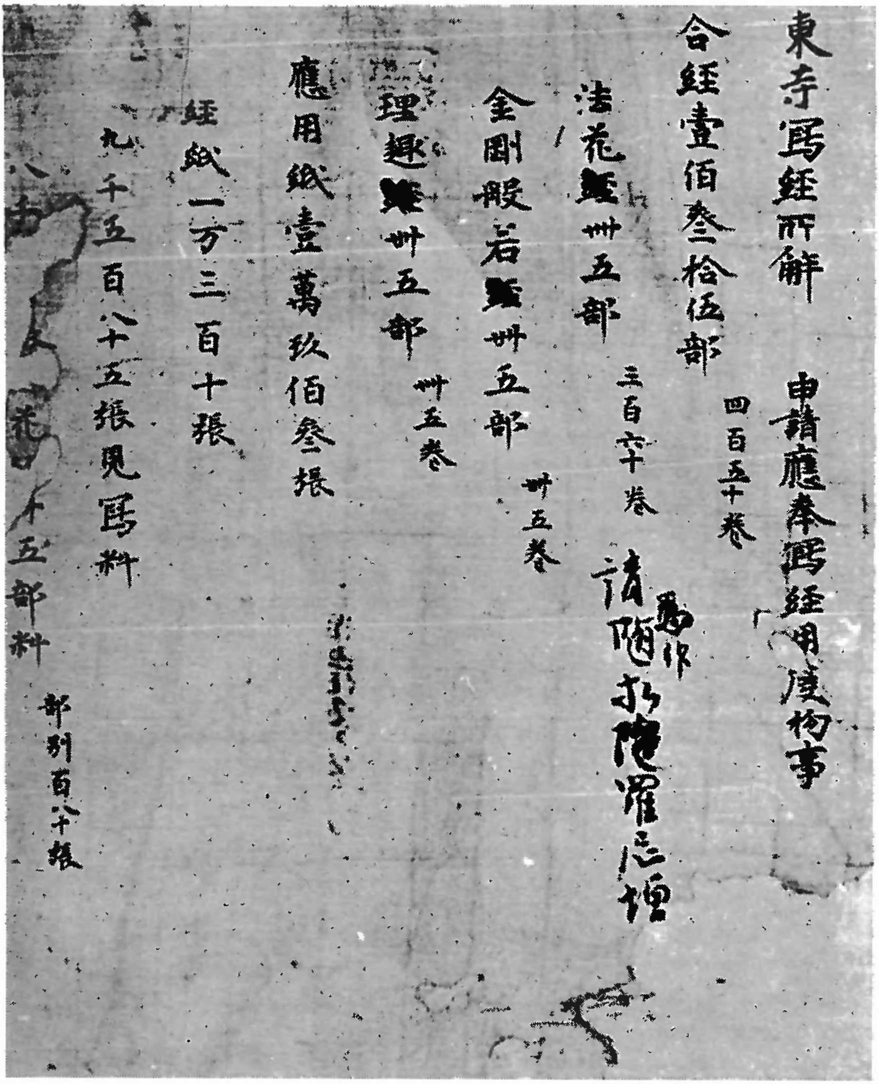
Supply requisition from the *sūtra*-copying bureau of the Tōdaiji.

Chinese language; dated in correspondence with A.D. 760; manuscript, in several hands.

This document records requisitions for writing paper, brushes, Chinese ink, and other supplies needed for copying a total of 450 rolls of Buddhist *sūtras* in Chinese, as well as requisitions for stipends payable in cloth, rice, and salt for the scribes employed in the work. Such copying was not only a practical enterprise providing temples and other groups with multiple copies of religious and liturgical texts, but also was a means of acquiring religious merit. Individuals or institutions donating the material support for this work reaped spiritual benefits from the very act of copying in much the same way that the patrons of chantries in medieval Europe benefited from the mass stipends they provided.

Among the Buddhist texts mentioned in the portion of the document shown here are the *Saddharmapuṇḍarīka* (the so-called "Lotus sūtra"), the *Vajracchedikā* ("Diamond-cutter"), and other *Prajñāpāramitā* texts. The script is partly in a fine, regular Nara clerk's hand, with endorsements and additions in a less regular and more cursive style. Comparison of the Chinese calligraphy of this document with the far less fluent ductus of the *Bussokuseki* inscription is instructive.

Manuscript, Shōsō-in collection, Nara.



東寺寫經所解　申請應奉寫經用度物事
合經壹佰參拾伍部　四百五十卷
法花經卌五部　三百六十卷
請隨求陀羅尼壇　爲作
金剛般若經卌五部　卌五卷
理趣經卌五部　卌五卷
應用紙壹萬玖佰參張
經紙一万三百十張
九千五百八十五張見寫料
八[illegible]花[illegible]五部料　部別百八十張

PLATE 2
Supply requisition from the *sūtra*-copying bureau of the Tōdaiji.

PLATE 3

Commentary on the text of the *Nihon shoki.*

Portion of a manuscript commentary dated in correspondence with 1510, including an excursus on the various names under which Japan appears in early texts.

The Chinese characters here are written in a somewhat cursive but clear and bold hand, interspersed with Japanese *katakana* of much smaller size; but the comparatively delicate ductus of the Chinese characters keeps them from overpowering the smaller *kana.* The use of the angular *katakana* in a manuscript of this variety reflects their traditional function (and ultimate origin) as glosses for Chinese texts, and at the same time their historical role as a "man's script." Works of commentary of this sort perpetuated the reading traditions upon which much of our modern understanding of the *Kokiki* and *Nihon shoki* is based.

Manuscript, private collection, Japan.

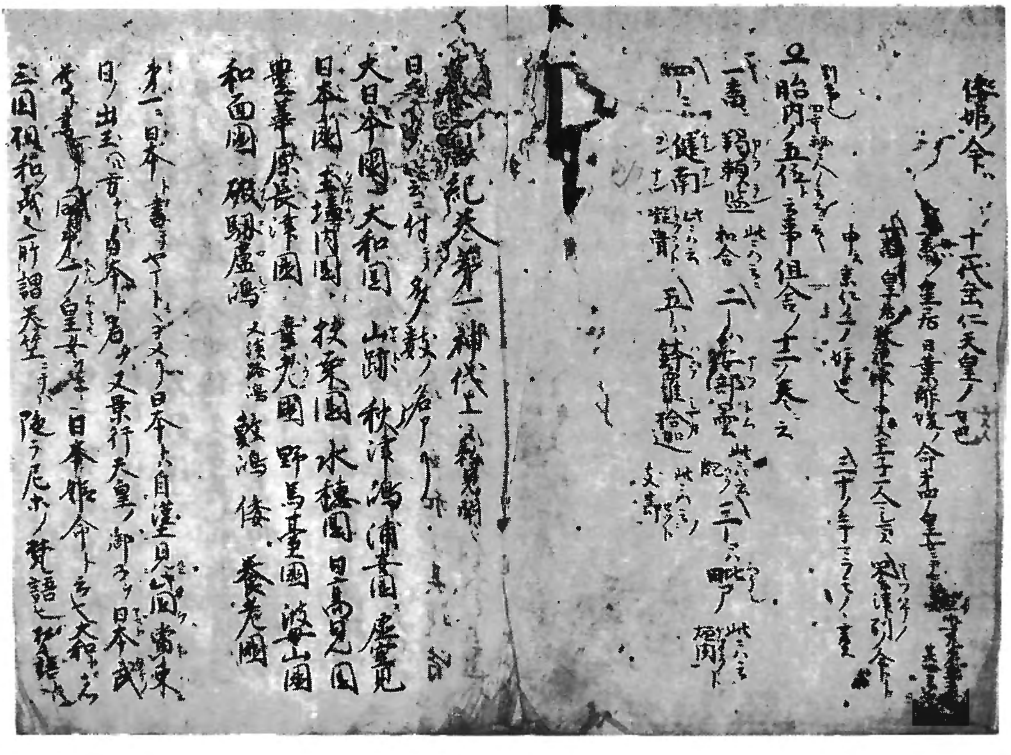


PLATE 3
Commentary on the text of the *Nihon shoki.*

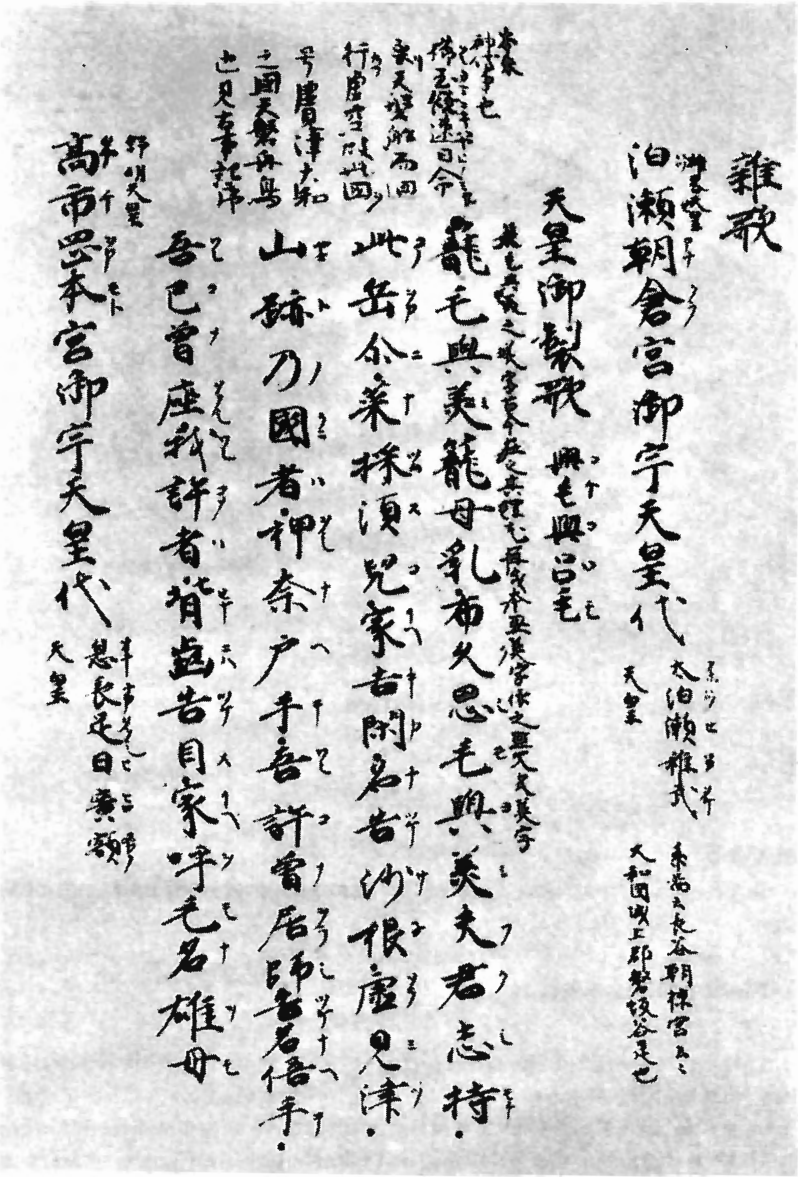
PLATE 4

The Nishi Hongaji Ms. of the *Man'yōshū.*

Old Japanese; the beautiful sixteenth-century manuscript of which the opening portion is illustrated is known today by the name of the great Kyōto temple to which it was presented by the Emperor Nara II, who reigned 1526–1557; in the original some of the interlinear glosses and the punctuation of the text are in vermilion, with the bulk of the text in Chinese ink.

The authentic text of the *Man'yōshū* itself consists only of the Chinese characters; all the "readings" attached to them in this or other texts are actually only later glosses. Several textual levels may be traced in the generation and transmission of these "readings"; the manuscript illustrated belongs to the most recent stage, based on the "readings" of the priest Sengaku (1203–?), who completed his *Man'yōshū* glosses in 1253; his work stressed critical philological separation of the text itself from the "readings." Indicating these in *katakana* alongside the Chinese characters of the text, as in this manuscript, was one of the important scholarly innovations which Sengaku brought to *Man'yōshū* studies.

The illustration shows the text of *Man'yōshū* 1: *ko mo yö / miko moti / Fukusi mo yö / mibukusi moti / kono woka ni natumasu ko / iFe kikana . . . ,* etc. The modern critical edition of the *Man'yōshū* in vols. 4–7 of the Iwanami *Nihon koten bungaku taikei* used this manuscript as the basic text for its collations, but it is interesting to note that even in this short first poem of the anthology the critical text which the Iwanami editors have established differs from the version given in this manuscript in several important particulars. Many of these differences involve variants in the Chinese-character text established through the collation of other manuscripts; but several others involve the choice of a different Old Japanese word to be associated with the same Chinese character (the Iwanami editors prefer Old Japanese *nörasane* for the Chinese character *kao* "report, tell," where this manuscript has *tukesane,* for example), and other inherent ambiguities of the *Man'yōshū* script.



雜歌

泊瀬朝倉宮御宇天皇代　大泊瀬稚武天皇

天皇御製歌

籠毛與美籠母乳布久思毛與美夫君志持

此岳尓菜採須兒家吉閑名告沙根虚見津

山跡乃國者押奈戸手吾許曽居師吉名倍手

吾己曽座我許者背齒告目家呼毛名雄母

高市岡本宮御宇天皇代　息長足日廣額天皇

PLATE 4
The Nishi Hongaji Ms. of the *Man'yōshū*.

PLATE 5

A printed *Man'yōshū* text with manuscript glosses and commentary.

Block-printed book, period 1704–1710.

This printed text has the poem texts proper in book-hand Chinese characters with the Old Japanese in the Sengaku reading tradition added in *katakana;* to this several eighteenth-century scholars have added manuscript notes in Chinese characters and *katakana,* as well as in cursive Chinese characters and *hiragana* between the lines of the text, horizontally along the upper margin, and also on vertical slips of paper pasted onto the printed page.

Private collection, Japan.

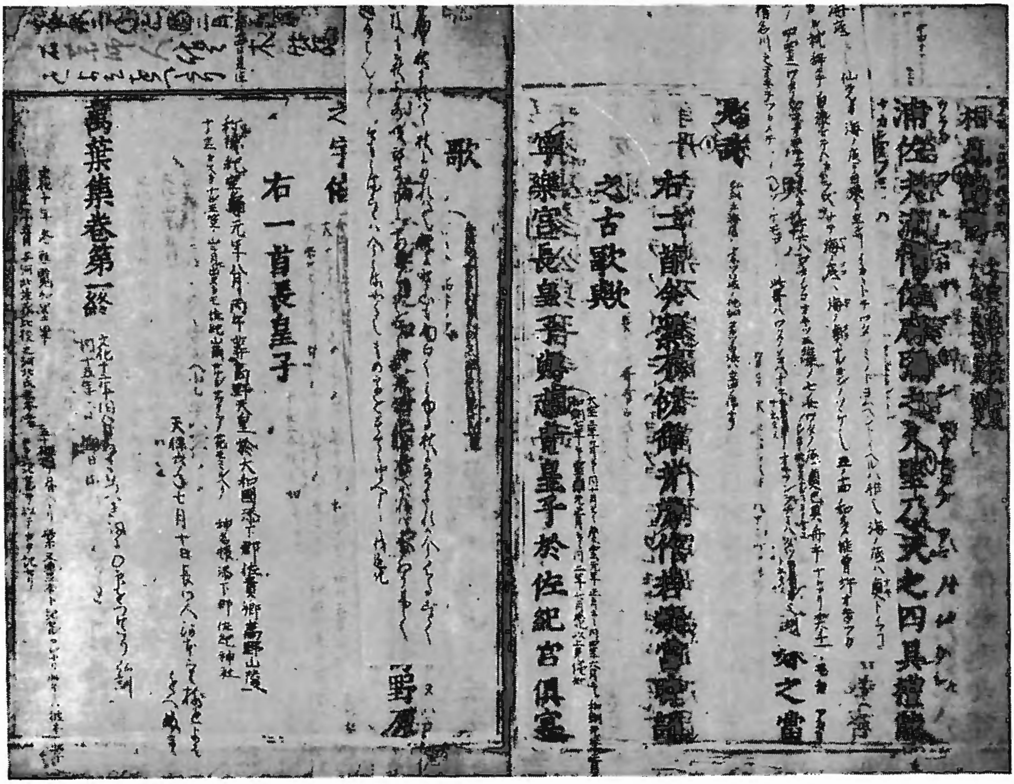


PLATE 5
A printed *Man'yōshū* text with manuscript glosses and commentary.

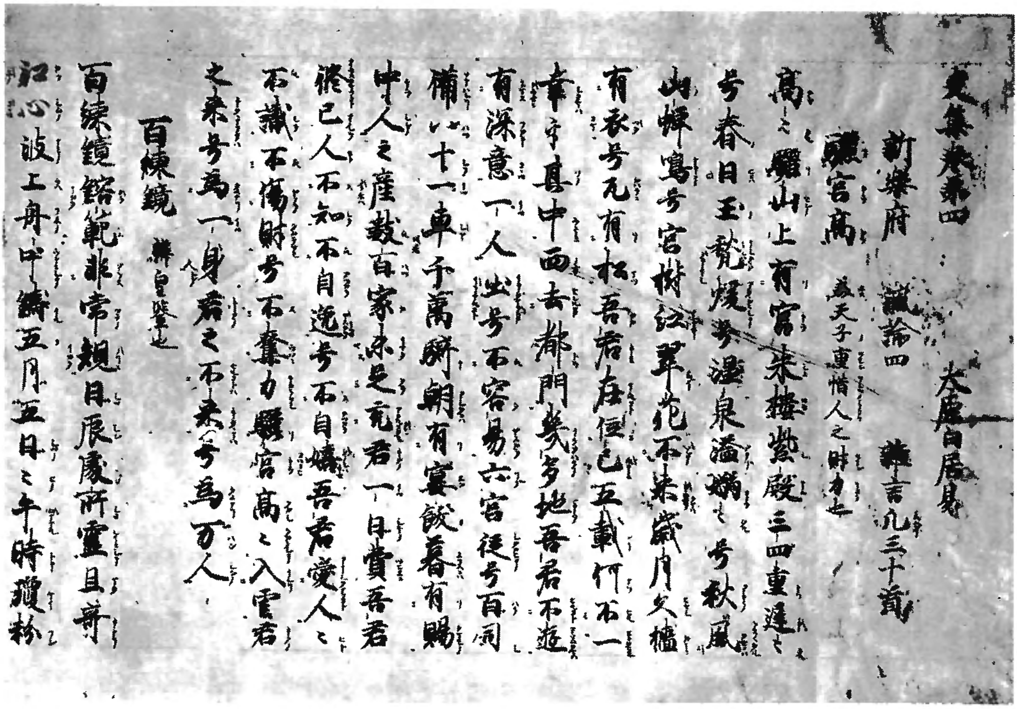
PLATE 6

Manuscript of the works of Po Chü-i with Japanese glosses.

Chinese, with Middle Japanese interlinear glosses and "reading" punctuation; dated in correspondence with 1289.

This beautifully written manuscript is notable for its striking aesthetic contrast between the confident, strong hand of the Chinese text of the poems and the tiny but very legible Japanese *katakana* to the left and right of the lines of the body of the text. In addition to the *katakana* indications of Japanese pronunciations and meanings for the original text the manuscript uses a variety of special punctuation marks to indicate which Chinese characters go together into compound words, and also to record the order in which the elements of the Chinese sentences are to be taken in turning them into Japanese, in the *kanbun* or "classical Chinese" reading tradition of the Japanese schools.

Private collection, Japan.



文集卷第四　　太原白居易

新樂府　諷諭四　雜言凡三十首

驪宮高　美天子重惜人之財力也

高〻驪山上有宮朱樓紫殿三四重遲〻

兮春日玉甃暖兮溫泉溢嫋〻兮秋風

山蟬鳴兮宮樹紅翠花不來歲月久牆

有衣兮瓦有松吾君在位已五載何不一

幸乎其中西去都門幾多地吾君不遊

有深意一人出兮不容易六宮從兮百司

備八十一車千萬騎朝有宴飫暮有賜

中人之產數百家未足充君一日費吾君

脩己人不知不自逸兮不自嬉吾君愛人〻

不識不傷財兮不傷力驪宮高〻入雲君

之來兮為一身君之不來兮為萬人

百鍊鏡　辨皇王鑒也

百鍊鏡鎔範非常規日辰處所靈且祇

江心波上舟中鑄五月五日〻午時瓊粉

PLATE 6

Manuscript of the works of Po Chü-i with Japanese glosses.

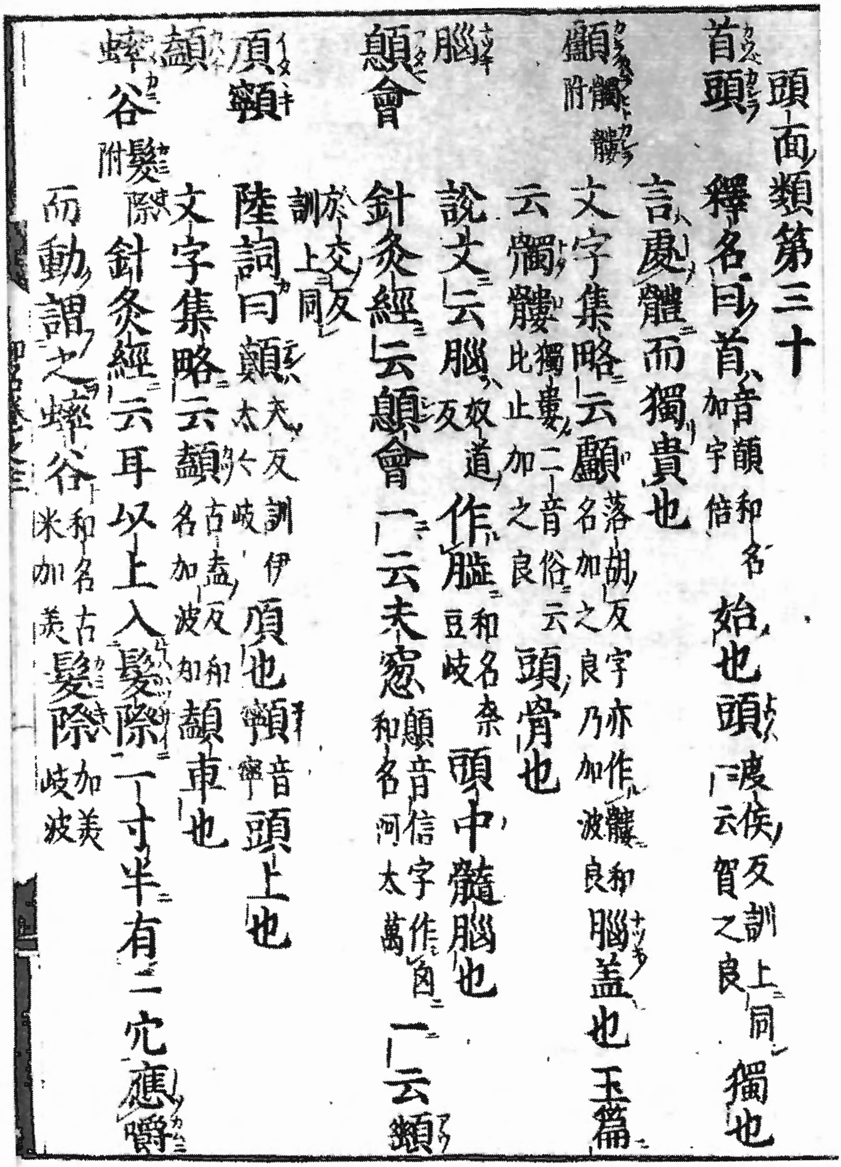
PLATE 7

A lexical source for late Old Japanese.

Printed book, Osaka, 1617, produced for a Kyōto bookseller; beginning of chapter 30 of Minamoto Shitagō's *Wamyōruijushō* (*ca.* 934).

The page illustrated lists words for parts of the head and face; the text itself is entirely in Chinese characters and in the Chinese language with the (late) Old Japanese pronunciations indicated in *man'yōgana*. Thus, in the second line of the text (from the right) the Old Japanese word for "head" is given as *kaubë* (<**kaũbë*), the equivalent of modern *kōbe*, cf. modern *kubi* "neck; head." The large Chinese characters give the lexical entries and definitions, largely extracted from Chinese lexical sources; the parts of the text in smaller Chinese characters give additional information including in most cases the (late) Old Japanese pronunciations in *man'yōgana*. In the printed text illustrated later *katakana* glosses have been added to the right of the characters to indicate the *kanbun* readings for the original Chinese text; other *kanbun* reading indications of word order have also been added to the right of the line, and characters going together into compounds have been indicated with connecting centered vertical lines.

Printed book, collection of Sterling Memorial Library, Yale University.



頭面類第三十

首頭

釋名曰首（音顫和名加宇倍）始也頭（度侯反訓上同一云賀之良）獨也

言處體而獨貴也

顱附髑髏

文字集略云顱（落胡反字亦作髗和名加之良乃加波良）腦蓋也玉篇

云髑髏（獨婁二音俗云比止加之良）頭骨也

腦

說文云腦（奴道反）作膉（和名奈豆岐）頭中髓腦也

顖會

針灸經云顖會一云天窻（顖音信字作囟和名河太萬）一云[illegible]

（於交反訓上同）

頂顊

陸詞曰顛（天反訓伊太々岐）頂也顊（音寧）頭上也

⿰盍頁

文字集略云⿰盍頁（古盍反和名加波加）⿰盍頁車也

蟀谷附髮際

針灸經云耳以上入髮際一寸半有二穴應嚼

而動謂之蟀谷（和名古米加美）髮際（加美岐波）

PLATE 7

A lexical source for late Old Japanese.

PLATE 8

The *Genji Monogatari*, Japan's greatest literary monument.

Late Old Japanese; by the authoress known to history as Murasaki Shikibu; *ca.* 1001–1010; a printed book of the Tokugawa period, n.d., n.p., with copious interlinear and marginal glosses by an anonymous hand.

The text of the *Genji* has been transmitted, as in this late printed text, almost entirely in *hiragana*, the flowing, cursive "woman's hand" of the Heian, with only a few Chinese characters used from time to time, chiefly to write Chinese loanwords. In the illustration, which shows the beginning of book 1 of the text (*izure no oFontoki ni ka neugo kaFui amata saFuraFi tamaFikeru / naka ni ito yamugoto naki kiFa ni Fa aranuga / sugurete tokimeki tamaFu arikeri* . . .), the Chinese characters have been printed in a cursive hand which harmonizes well with the *hiragana,* and presents the eye with a pleasing, well-balanced graphic line. The Chinese character for the honorific verb *tamaF-u* in lines 1 and 3 has been abbreviated into little more than a running double loop.

Printed book, collection of Sterling Memorial Library, Yale University.

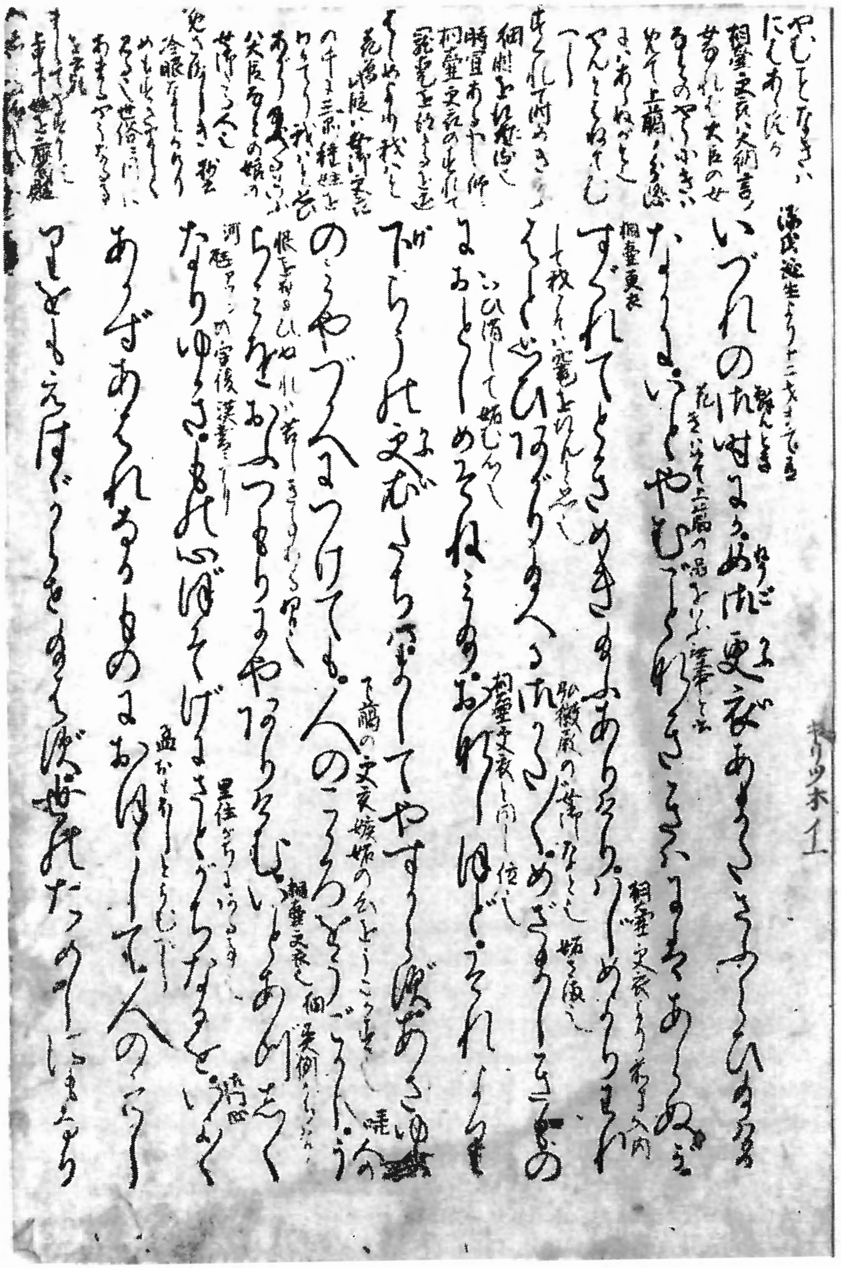


PLATE 8

The *Genji Monogatari*, Japan's greatest literary monument.

PLATE 9

The *Utsubo monogatari,* a Heian romance.

Late Old Japanese; anonymous, *ca.* 970; printed book of 1677.

The text of this block-printed book combines the extremely graceful *hiragana* in which the bulk of it is written with a limited number of almost equally cursive Chinese characters, the two together giving a highly pleasing if somewhat "busy" appearance to the completed page. The pronunciation of almost all the cursive Chinese characters in the text is indicated by small *hiragana* glosses printed to the left of the characters; but the reader who has managed to understand *chūnagon* (an official title) which is not glossed in the first line of the selection will hardly need the *hiragana* gloss which this word then has in the second to the last line on this same page. Traditional printing in both Japan and China used one side of a sheet of paper which was then folded to make a double page with the fold coming at the outer edge of the book; the printing now on the reverse of the page as bound tends to show through in the reproduction, and looks somewhat like a shadow of the text.

Printed book, collection of Sterling Memorial Library, Yale University.

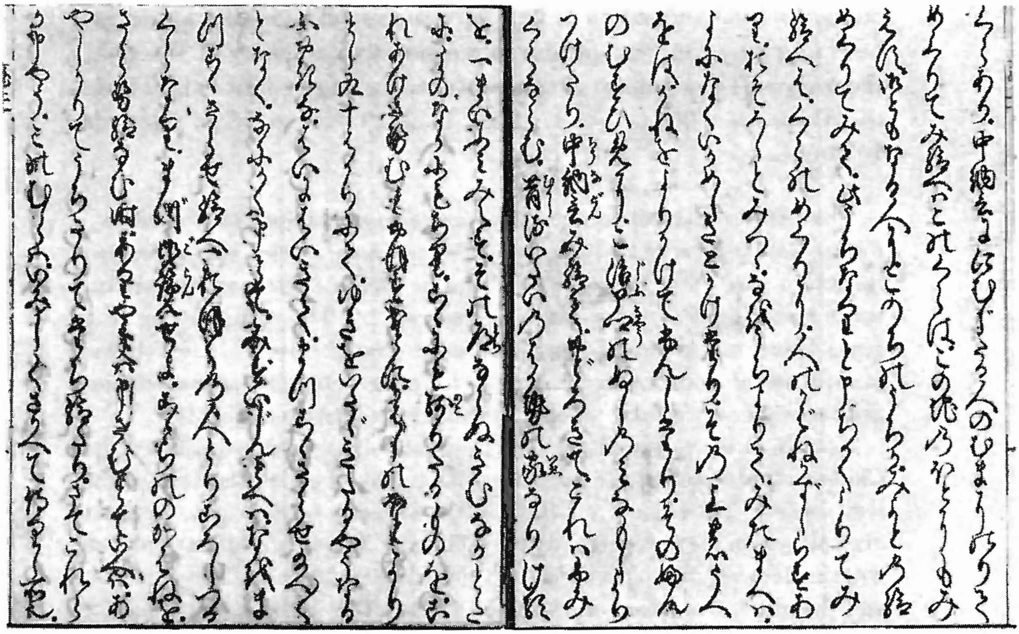


PLATE 9
The *Utsubo monogatari*, a Heian romance.

PLATE 10

Heian poetry in Heian calligraphy.

Late Old Japanese; calligraphic fragment from a manuscript attributed to Fujiwara Tameie (1198–1275), son and poetic heir of Fujiwara Teika (1162–1241).

This exquisitely executed example of elegant Heian calligraphy is written in Chinese ink on paper decorated with a stylized cloud pattern top and bottom in light colors and flecked with gold; in modern times the specimen illustrated, known to collectors as the Ono Fragment (*Onogire*), has been mounted as a hanging vertical scroll. This fact gives some indication of how very successful the calligrapher has been in giving concrete graphic expression to the poetry of the texts themselves. These consist of two poems and a fragment of a third from the *Kokinshū* of 905 (see text, p. 38), book 19 (*Kokka taikan* numbers 1050–52).

The text reads: [1050] *nakaki: kumo Farenu asama no yama no asamasi ya / Fito no kokoro wo mite koso yamame* [1051] *ise: naniFa naru nagara no Fasi mo tukuru nari / ima Fa waga ni wo nani ni tatoFen* [1052] *yomiFito sirazu: mame naredo nani so Fa yokeku karu kaya no*. . . . The poems belong to a genre known as *haikaiuta* "unconventional, comic verses," in which the studied use of unconventional diction, farfetched conceits, and overly ingenious word play creates an effect of humorous unconventionality.

Notable in the calligraphy is the beauty of balance achieved between the Chinese characters and the *hiragana* orthography of which the bulk of the text consists; the elegant variation in the *hiragana* orthography, with, for example, *asa* in the first poem written differently each time it appears, and *no* written differently out of consideration of aesthetic balance in different places; and the absence of *nigori* markings of voicing, thus orthographic *waka* for *waga*, and *nareto* for *naredo*.

Manuscript, collection of Professor Robert H. Brower, Ann Arbor, Michigan.

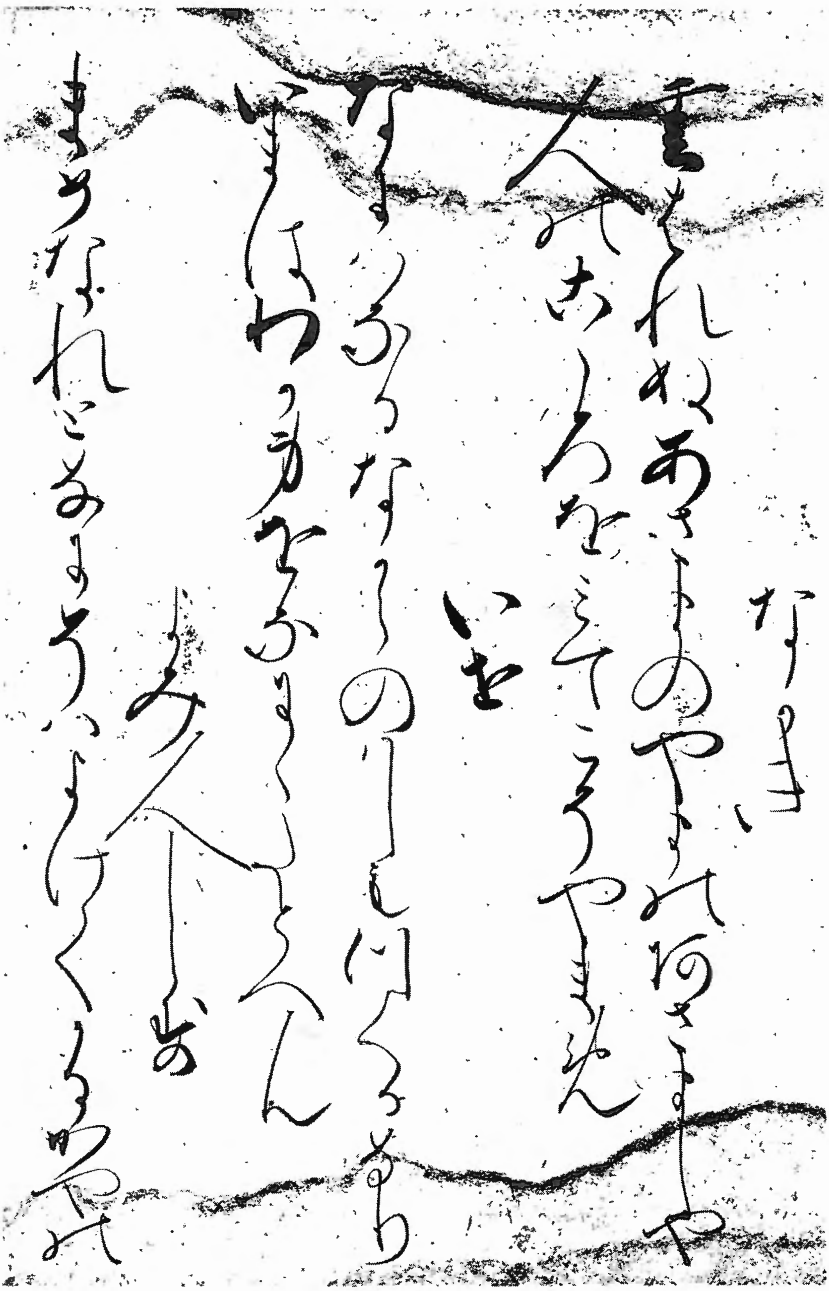


PLATE 10
Heian poetry in Heian calligraphy.

PLATE 11

Another *Kokinshū* calligraphic fragment.

Late Old Japanese; calligraphy by Fujiwara Shunzei (1114–1204) (see text, p. 41).

This fragment contains among other texts poem 751 from the *Kokinshū* book 15 (*Fisakata no / amatu sora ni mo / sumanaku ni / Fito Fa yoso ni zo / omoFuberanaru*); the hand has a boldness and vigor somewhat lacking in the fragment illustrated in Plate 10. Once more the lack of *nigori* and elegant variation in the choice of *hiragana* are to be noted.

Manuscript, private collection, Japan.

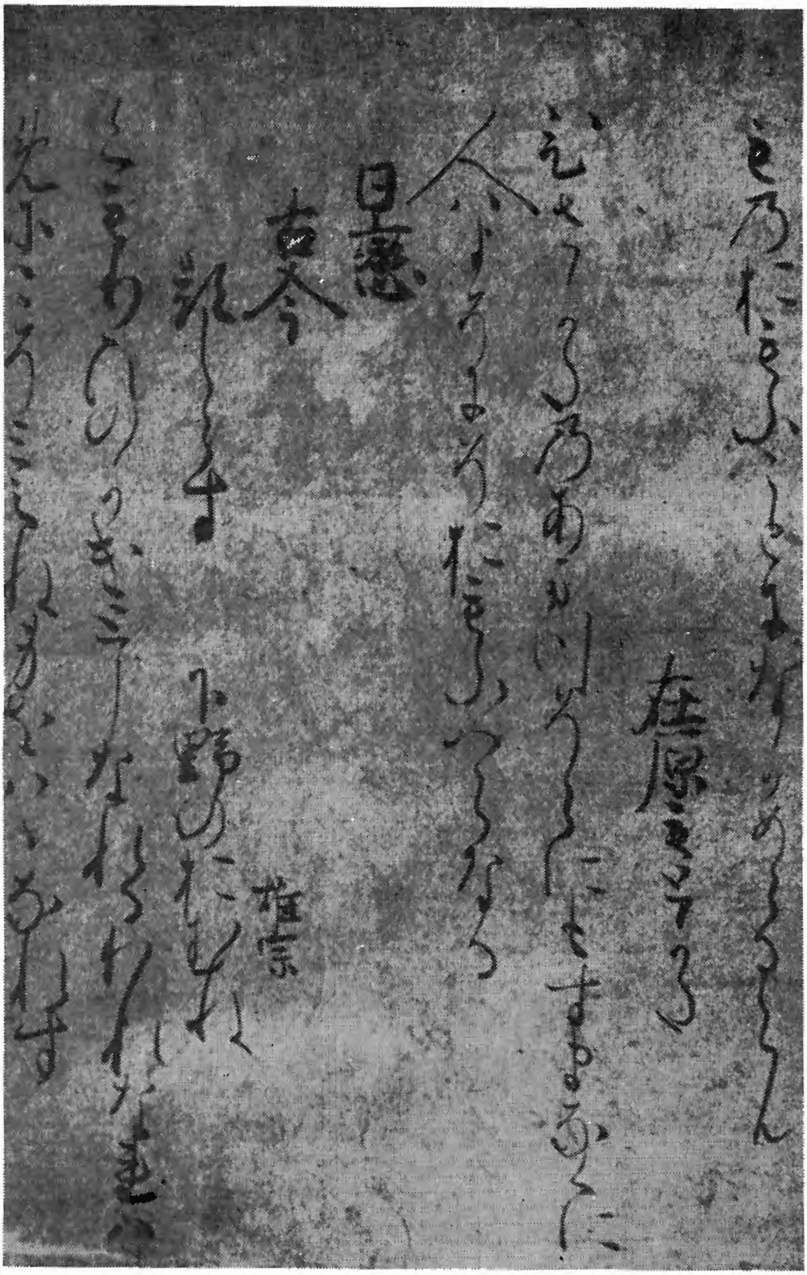


PLATE 11

Another *Kokinshū* calligraphic fragment.

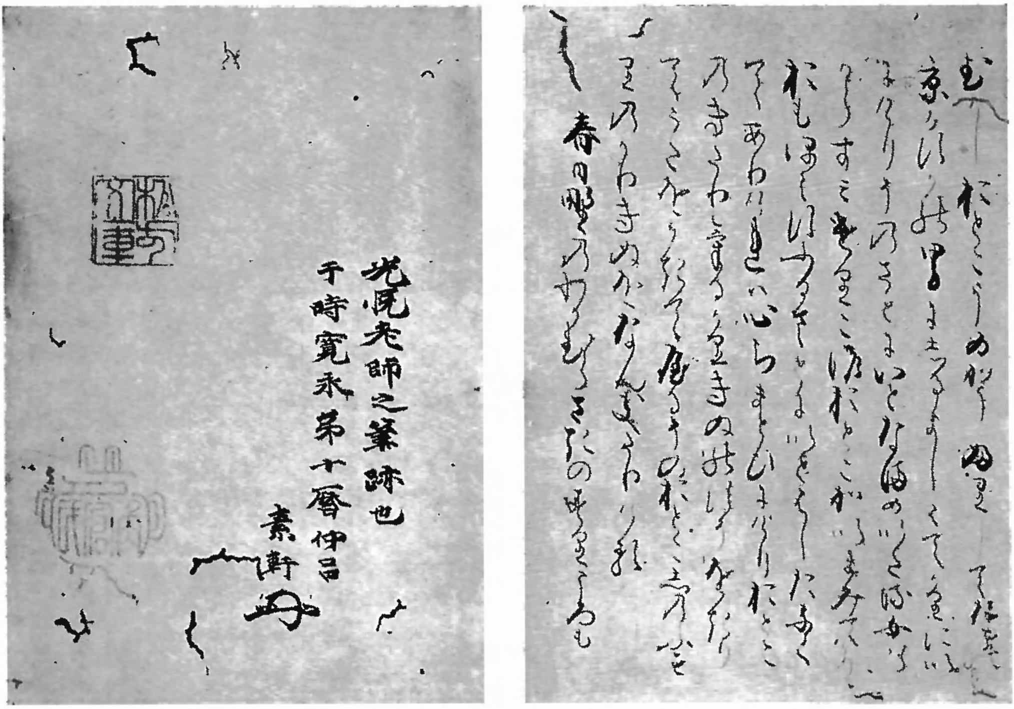
PLATE 12

A Tokugawa manuscript of the *Ise monogatari.*

Late Old Japanese; ascribed to Ariwara Narihira (825–880); manuscript with colophon dated in correspondence with 1633, and attributing its calligraphy to Hon'ami Kōetsu (1556–1637).

Kōetsu was a poet, painter, and ceramic artist. The calligraphy in this *Ise monogatari* manuscript which is attributed to his brush is notable for its combination of fairly massive Chinese characters with almost spidery *hiragana.* His skill shows itself in the judicious use from time to time of a few almost equally impressive *hiragana* symbols which provide a visual link between the two otherwise quite disparate styles of script. The total effect is as a result somewhat more uniform and certainly more interesting to the eye than less imaginative but more regular calligraphy might have been. Unfortunately, in painting and calligraphy as well as in ceramics, attributions to the celebrated and prolific Kōetsu can hardly ever be taken seriously; but whoever may have been responsible for this manuscript, he was a real master of the brush.

Manuscript, private collection, Japan.



光悦老師之筆跡也
于時寛永第十暦仲呂
素軒

PLATE 12
A Tokugawa manuscript of the *Ise monogatari.*

PLATE 13

An Ashikaga manuscript of the *Yamato monogatari.*

Late Old Japanese; manuscript to be dated on calligraphic grounds somewhere near the end of the Ashikaga period (1392–1568).

The calligrapher has achieved impressively adroit balance between the several cursive Chinese characters which appear in the text and the *hiragana* which constitute its bulk by means of a uniform, bold ductus typical of the period; but to modern eyes at least the result lacks both the grace and elegance of the Heian exemplars and the perfection and polish of the later hands (compare Plates 10, 11, and 12). The portion of the manuscript illustrated has been considerably damaged by wormholes.

Manuscript, private collection, Japan.

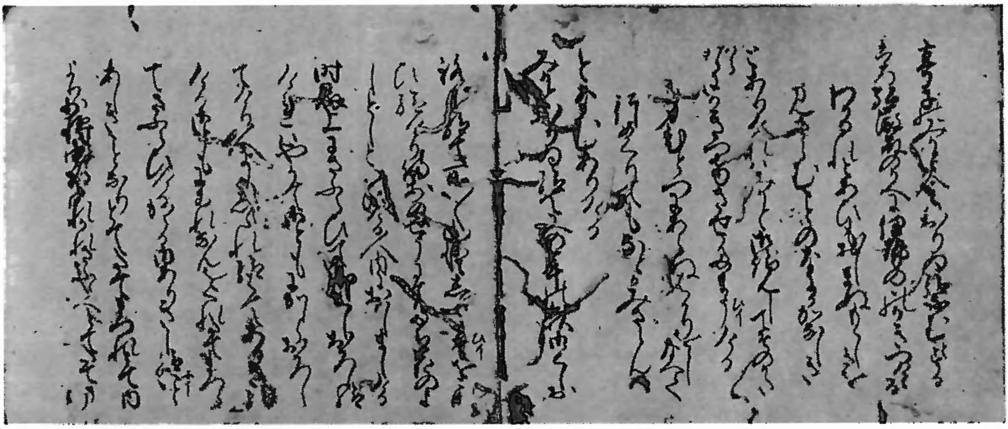


PLATE 13
An Ashikaga manuscript of the *Yamato monogatari*.

PLATE 14

A Sino-Japanese poetical anthology.

Chinese language text with late Old Japanese glosses; anthology of Chinese and Japanese poetry compiled 1013 by Fujiwara Kintō (966–1041); manuscript of text with commentary and interlinear and marginal glosses; colophon dated in correspondence with 1535.

The text illustrated is the *Wakan rōeishū,* an anthology which brought together notable poetic compositions in Chinese by Chinese poets and in Japanese by Japanese poets; among the forty or more Chinese poets represented Po Chü-i is the most popular, while Ki Tsurayuki (see text, p. 38) is the most popular Japanese poet.

The manuscript shown has the Chinese text in a bold, regular hand; the Japanese glosses combine Chinese characters and *katakana,* and also use *katakana* to indicate pronunciations and readings.

Manuscript, private collection, Japan.

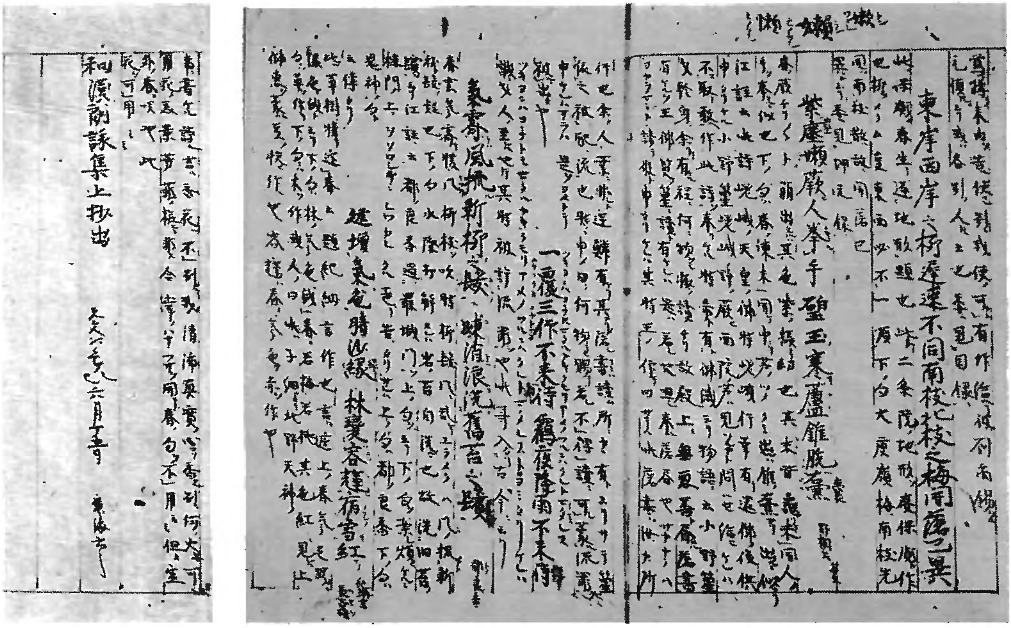


PLATE 14
A Sino-Japanese poetical anthology.

PLATE 15

A Momoyama manuscript of the *Eiga monogatari.*

Late Old Japanese; manuscript to be dated on calligraphic grounds in the Momoyama period (1568–1598).

An example of still another solution to the calligraphic problem of matching the aesthetic effect of cursively written Chinese characters with *hiragana* in a *monogatari* manuscript. Comparison with other illustrations (Plates 12 and 13 in particular) will show how the visual effect of the completed page here differs strikingly from that of the calligraphy of other periods and tastes.

Manuscript, private collection, Japan.

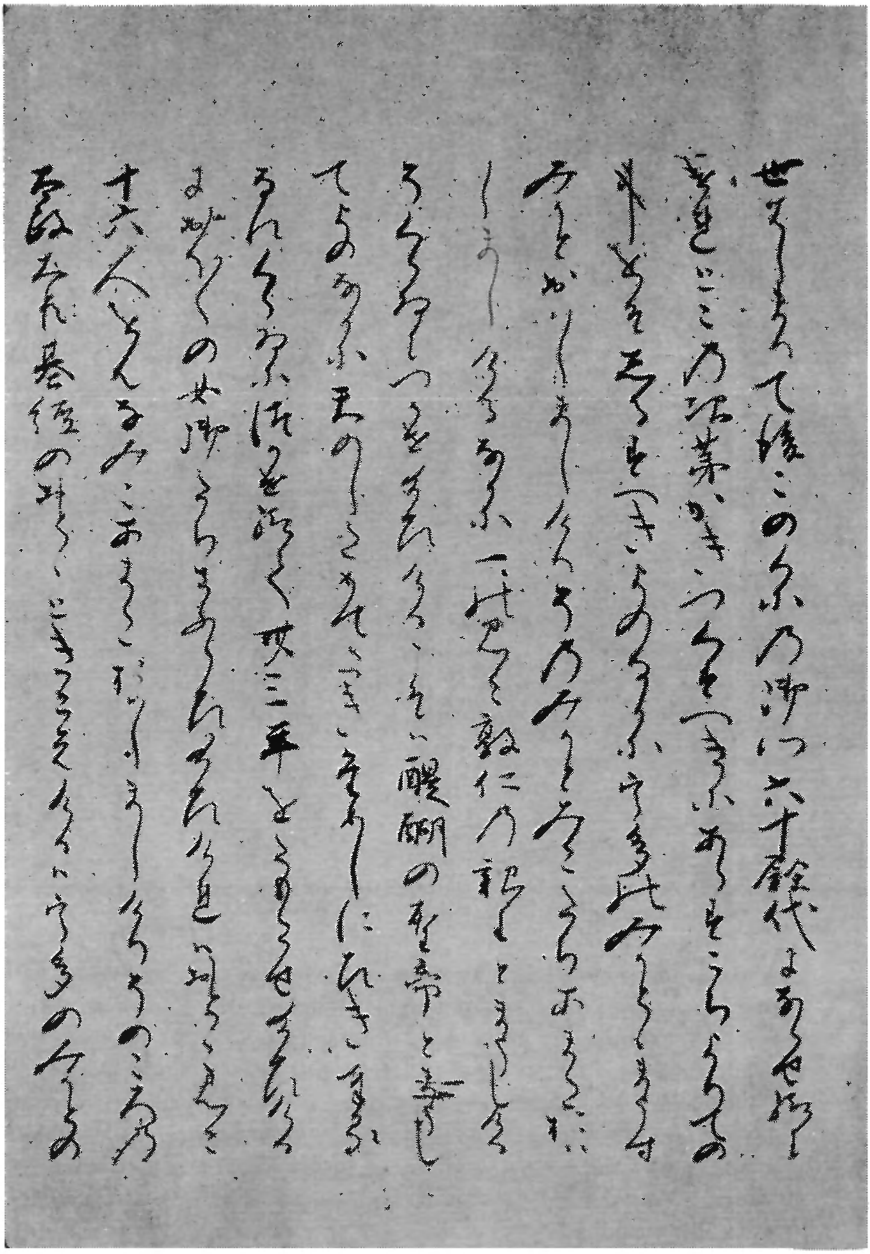


PLATE 15

A Momoyama manuscript of the *Eiga monogatari*.

PLATE 16

A manuscript note of the Kamakura period.

Middle Japanese; manuscript jotting on the reverse of an anonymous and untitled manuscript dated on calligraphic grounds in the Kamakura period (1185–1392). The rapidly jotted down personal note or letter (*shōsoku*) was the natural occasion for the development of an extremely cursive, connected script in which the majority of the graphs used were Chinese characters, often highly abbreviated in form in addition to their cursive quality, and combined with connected *hiragana* in such a way as almost completely to obscure any difference in visual effect between the two scripts. The example illustrates such a note, rapidly scribbled on the back of a Kamakura manuscript consisting of literary extracts of the type which somewhat later are called *Shōmono* (see text, p. 48).

Manuscript, private collection, Japan.

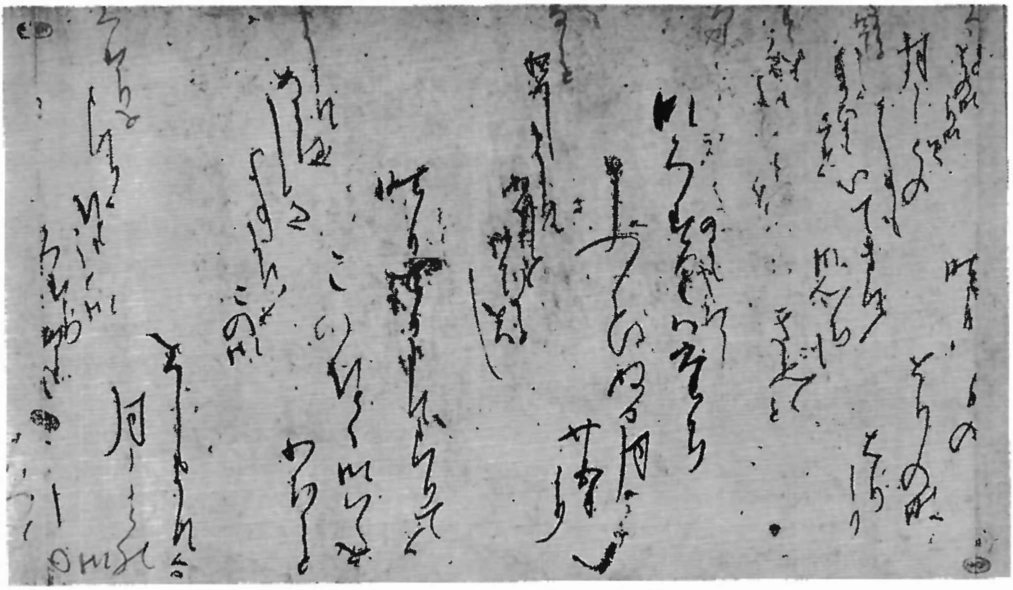


PLATE 16
A manuscript note of the Kamakura period.

PLATE 17

An eighteenth-century calligraphic note in the Chinese style.

Early Modern Japanese; note (*shōsoku*), dated fifteenth day of the sixth lunar month, without mention of the year; signed by Fujiwara Mitsutsuna (1710–1760).

This handwritten correspondence between two officials in the service of the Crown Prince at the Imperial court in Kyoto is in the Japanese language, but written almost entirely in Chinese characters; nor is the written style that of genuine *kanbun* or classical Chinese designed to be read as Japanese. Rather it is in the curious half-Japanese half-Chinese that evolved in answer to the desire to produce written matter that looked as much like Chinese as possible, while still written in the Japanese language. The elegantly cursive hand of this document is in keeping with the background of its author, a Fujiwara noble (*kūge*).

Calligraphy, mounted as a hanging scroll; author's collection.

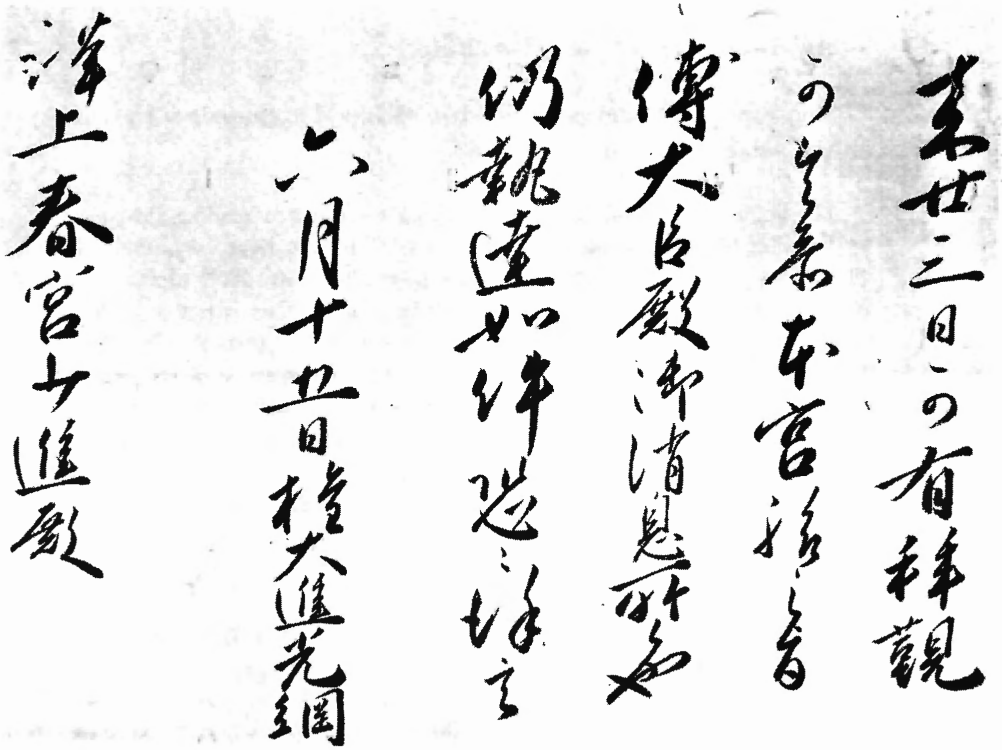


PLATE 17

An eighteenth-century calligraphic note in the Chinese style.

PLATE 18

An all-*kana* text of the *Lotus sūtra.*

Sino-Japanese; manuscript dated on calligraphic grounds at the end of the Ashikaga period (1392–1568).

The manuscript transcribes into *hiragana* a connected reading (*bō-yomi*, lit. "reading [straight up-and-down, like] a stick") in Sino-Japanese pronunciation of the Chinese translation by Kumārajīva (344–413? 409?) of the *Saddharmapuṇḍarīka*, a major Buddhist scriptural text. This is not a *kanbun* interpretation and translation of the text (compare the texts illustrated in Plates 6 and 14), but simply transcribes the Sino-Japanese pronunciation of the Chinese characters of the text read one after the other. The first three lines of the illustration (following the first line, which is the title) read in transcription as modern Sino-Japanese as follows: *nyōze gamon ichiji butsujū ōshajō / gishaku kussenjū yo daibikushū mannisen / ninku kaize arakan shoroijin mububon. . . .* Chinese characters are used in the manuscript only for the numbers, but even the character *ichi* "one" in the first line of the text has been glossed with its reading in *hiragana.*

Such a text is of course unintelligible as language, but reciting and chanting Buddhist texts in their connected Sino-Japanese pronunciation is a common liturgical observance, and a text such as this one would make it possible even for someone unacquainted with Chinese script to "read" the *sūtra* in this fashion. The *kana* orthography is regular and bold; and naturally the text, since it is designed to indicate pronunciation explicitly, uses the *nigori.*

Manuscript, private collection, Japan.

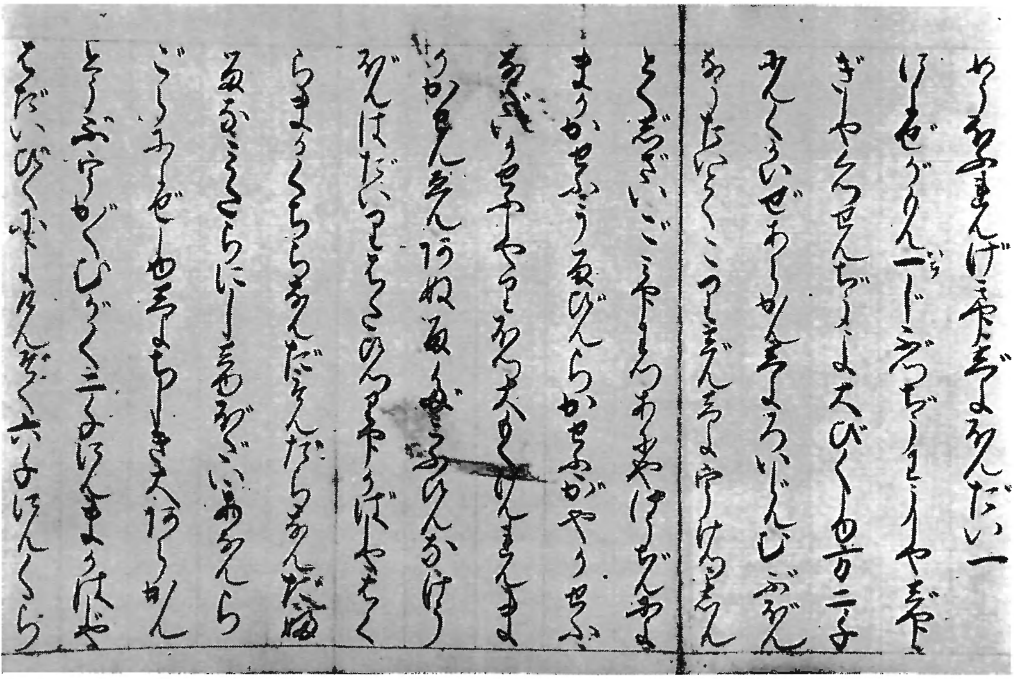


PLATE 18
An all-*kana* text of the *Lotus sūtra.*

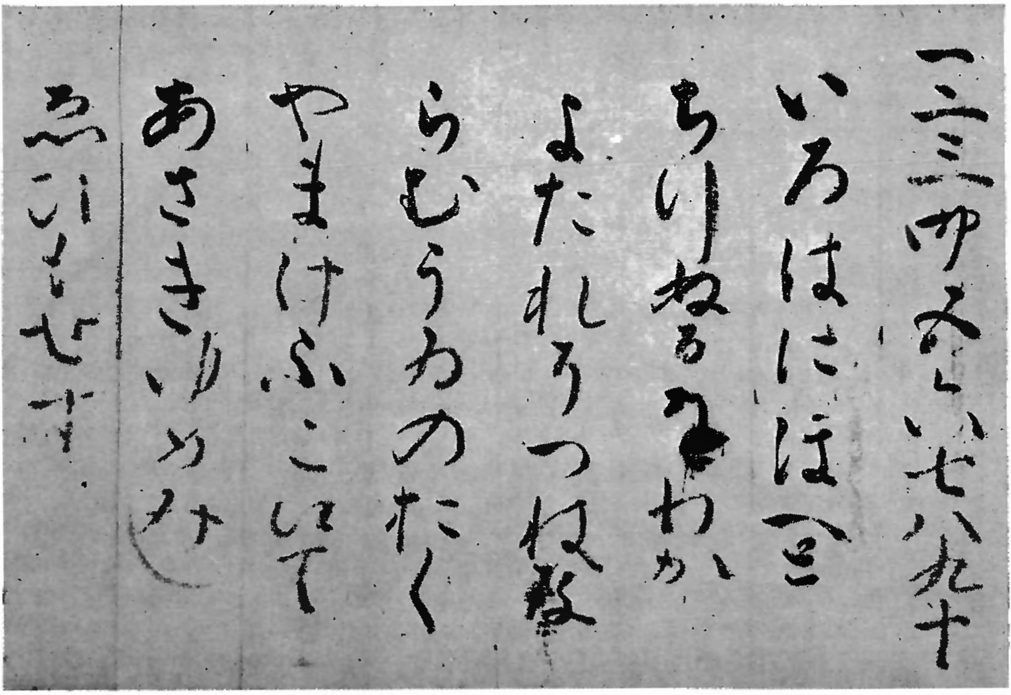
PLATE 19

Tokugawa Ieyasu's copybook.

Manuscript; calligraphy by Tokugawa Ieyasu (1542–1616).

This document is of greater historical than calligraphic interest; it has been handed down in a cadet branch of the Tokugawa family formerly enfeoffed in modern Wakayama Prefecture, and is said to be in the handwriting of the founder of the Tokugawa shōgunate. It shows the Chinese characters for the numbers from "one" to "ten," followed by the *hiragana* syllabary arranged in the order of the *i-ro-ha* poem (see text, p. 127), in a masculine hand that makes the attribution fully credible.

Manuscript, private collection, Japan.



一二三四五六七八九十
いろはにほへと
ちりぬるをわか
よたれそつねな
らむうゐのおく
やまけふこえて
あさきゆめみし
ゑひもせす

PLATE 19
Tokugawa Ieyasu's copybook.

PLATE 20

A manuscript model for Tokugawa letter-writers.

Manuscript; to be dated on calligraphic grounds and internal evidence in the mid- or late Tokugawa period (1615–1867).

The illustration shows a double page from a manuscript *Shoka bunkaku* (*Model letters for divers uses*), a Tokugawa copybook exemplar for different varieties of official correspondence. The language of the samples shown is Japanese, but the script manages to disguise this fact almost completely both by its orthography and its calligraphy—the orthography uses as many Chinese characters as possible, to make the text look like Chinese, and the calligraphy has blended the cursive Chinese characters closely together with a few almost indistinguishable *hiragana*.

Manuscript, bound as a book, collection of Sterling Memorial Library, Yale University.

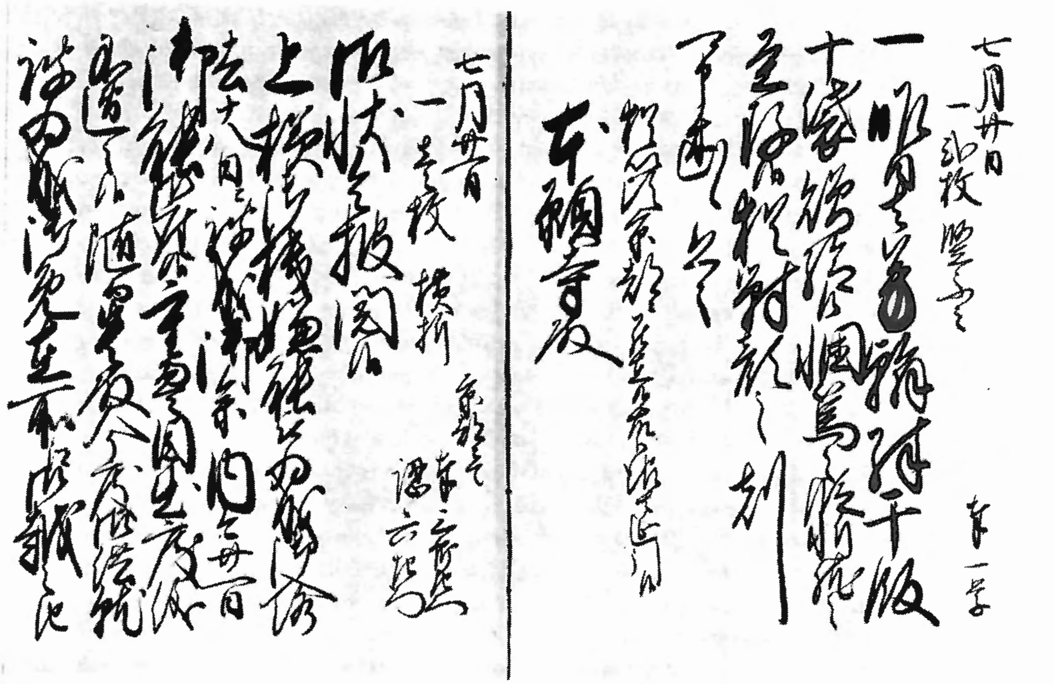


PLATE 20
A manuscript model for Tokugawa letter-writers.

PLATES 21, 22

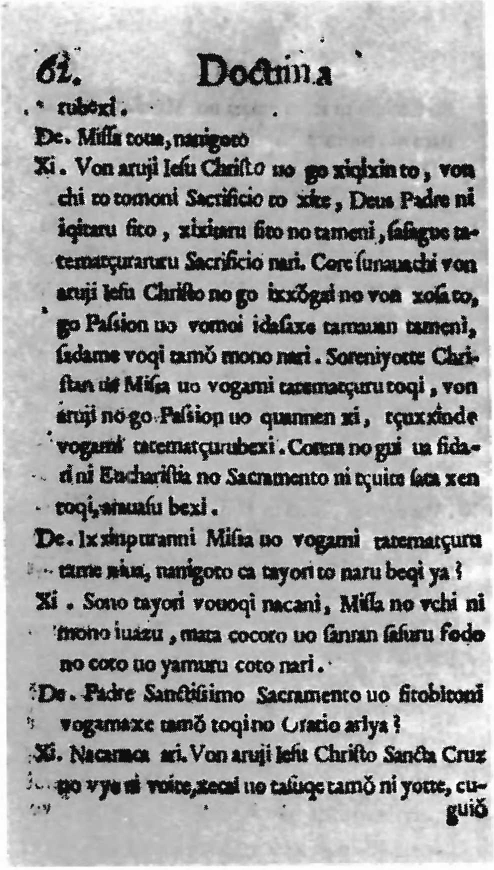
The *Doctrina Christan* in romanized Japanese.

Middle Japanese; printed book in romanization, Amakusa, 1592; p. 62 (Fig. 21) and p. 63 (Fig. 22) reproduced from a Tokyo, 1928 collotype facsimile of the Tōyō Bunko's exemplar.

This beautifully printed example of the work of the early foreign mission press in Japan is a summary, in question and answer form, of the main tenets of the Roman Catholic faith. The text stresses counter-Reformation theology and doctrinal positions, but includes no biblical translation or scriptural citations. The pages shown deal with the doctrine of the Mass as sacrifice and sacrament; on p. 62 (Plate 21) the second line begins: *Missa toua, nanigoto,* i.e., *missa to wa nanigoto* "what is the Mass?"; the reply begins, *Von aruji Iesu Christo no go xiqixin to, von chi to tomoni Sacrificio to xite, Deus Padre ni iqitaru hito, xixitaru fito no tameni, sasague tatematçuraruru Sacrificio nari,* "[It] is a sacrifice deferentially offered up to God the Father on behalf of the quick and the dead, making a Sacrifice of the august body together with the august blood of our august Lord Jesus Christ." In the orthography the use of *x* for [š], and the distinction between ŏ for [ɔ:] and ô for [o:] are to be noted. Thus, in forms appearing on the pages illustrated, *tçuxxinde* [tsuššinde] "worshipfully," modern *tsutsushinde; vogamaxe tamŏ toqi* [wogamaše tamɔ: toki] "when [the priest] causes [the people] to worship [the Sacrament, i.e., at the elevation]," equivalent to modern *ogamasetamau toki; xecai* [šekai] "[this] world," modern *sekai;* and *vôqinaru* [wo: kinaru] "great," modern *ōkinaru.* The many loanwords from Latin and Portuguese which are used throughout the text for religious terms (Oratio, Deus, Padre, Missa, Sacrificio, Passion, Sanctissimo Sacramento, Purgatorio, etc.) are spelled in their normal orthography as used in the languages from which they were borrowed, rather than attempting to represent the pronunciation they would have received as loanwords in Japanese (*orašiyo, deusu, bateren,* etc.). This wholesale use of foreign terms helped avoid coming to grips with the extremely difficult problems of providing translations for the technical terms of European religion. When the early missionaries did depart from this practice it was usually to their peril. In this text the Buddhist term *xiqixin* [šikišin], modern *shikishin,* is used for "body (in the Eucharist)," but in Buddhism the term is the Chinese translation for Sanskrit *saṃbhogakāya,* "the corporal or visible body of the Buddha."

Copies of the 1592 *Doctrina Christan* are extremely rare, and none appear to have survived the persecutions of the Catholic mission on Japanese soil; the one illustrated was identified by a Japanese visitor to Lisbon, Portugal, where he was shown it in 1902. Before that date virtually nothing is known of its history. It came onto the European rare-book market in 1915, and was purchased and brought back to Japan by a Japanese industrial magnate in 1918.

Printed book, collection of the Tōyō Bunko, Tokyo.



62. Doctrina

rubexi.

De. Miſſa toua, nanigoto

Xi. Von aruji Ieſu Chriſto no go xiqixin to, von chi to tomoni Sacrificio to xite, Deus Padre ni iqitaru fico, xixitaru fito no tameni, ſaſague tatematçuraruru Sacrificio nari. Core ſunauachi von aruji Ieſu Chriſto no go ixxōgai no von xoſa to, go Paſsion uo vomoi idaſaxe tamauan tameni, ſadame voqi tamō mono nari. Soreniyotte Chriſtan uâ Miſſa uo vogami tatematçuru toqi, von aruji no go Paſsion uo quannen xi, tçuxxinde vogami tatematçurubexi. Coreno gui ua ſidari ni Euchariſtia no Sacramento ni tçuite ſata xen toqi, arauaſu bexi.

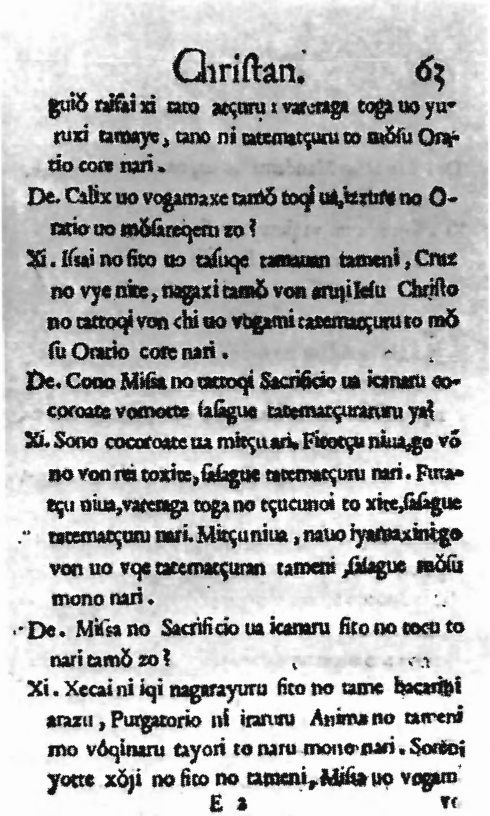
De. Ixxinpuranni Miſſa uo vogami tatematçuru tame niua, nanigoto ca tayori to naru beqi ya?

Xi. Sono tayori vouoqi nacani, Miſſa no vchi ni mono iuazu, mata cocoro uo ſanran ſaſuru fodo no coto uo yamuru coto nari.

De. Padre Sanctiſsimo Sacramento uo fitobitoni vogamaxe tamō toqi no Oratio ari ya?

Xi. Nacanaca ari. Von aruji Ieſu Chriſto Sancta Cruz no vye ni voite, xecai no taſuqe tamō ni yotte, cu-
guiō

PLATES 21
The *Doctrina Christan*
in romanized Japanese.



Chriſtan. 63

guiō raiſai xi tato aeçuru, vareraga toga uo yuruxi tamaye, tano ni tatematçuru to mōſu Oratio core nari.

De. Calix uo vogamaxe tamō toqi ua, izzureno Oratio uo mōſareqeru zo?

Xi. Iſsai no fito uo taſuqe tamauan tameni, Cruz no vye nite, nagaxi tamō von aruji Ieſu Chriſto no tattoqi von chi uo vogami tatematçuru to mō ſu Oratio core nari.

De. Cono Miſſa no tattoqi Sacrificio ua icanaru cocoroate vomotte ſaſague tatematçuraruru ya?

Xi. Sono cocoroate ua mitçu ari. Fitotçu niua, go vō no von rei toxite, ſaſague tatematçuru nari. Futatçu niua, vareraga toga no tçucunoi to xite, ſaſague tatematçuru nari. Mitçu niua, nauo iyamaxini go von uo vqe tatematçuran tameni, ſaſague mōſu mono nari.

De. Miſſa no Sacrificio ua icanaru fito no tocu to nari tamō zo?

Xi. Xecai ni iqi nagarayuru fito no tame bacarini arazu, Purgatorio ni iraruru Anima no tameni mo vôqinaru tayori to naru mono nari. Soreni yotte xōji no fito no tameni, Miſſa uo vogam

E 2 vo

PLATES 22
The *Doctrina Christan*
in romanized Japanese.

PLATE 23

The "Preface" (*jo*) to the 1592 romanized *Doctrina Christan.*

Middle Japanese; page A2 of the text described in the caption to Plates 21, 22.

PLATE 24

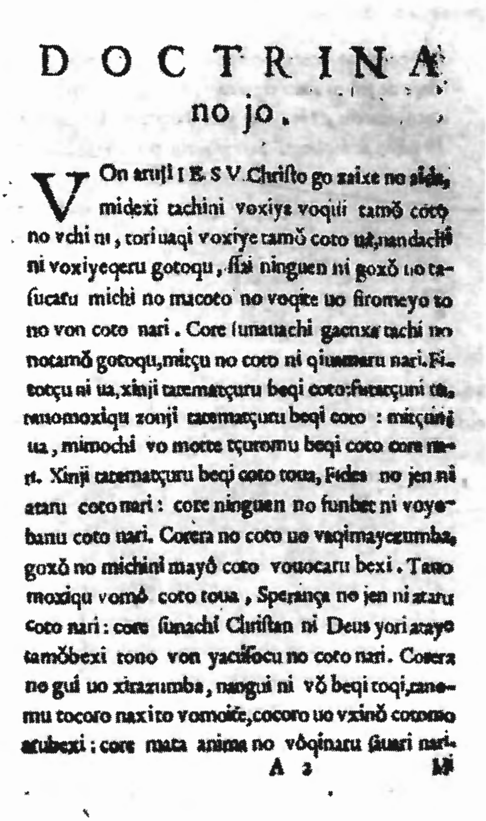
The "Preface" (*jo*) to the 1600 Japanese script *Doctrina Christan.*

Middle Japanese; unnumbered page from printed book in movable type, Nagasaki, 1600.

Romanized books such as the 1592 Amakusa *Doctrina Christan* were designed primarily for the use of the European missionaries in their work of learning the language and providing instruction for their Japanese converts. It soon became apparent that it would be more convenient and more socially acceptable to provide other versions of the same or similar texts in Japanese orthography for the use of the Japanese themselves. To produce these the mission presses pioneered in the cutting and use of movable types to print Japanese texts, which until the technical innovations of the European presses had almost always been printed in Chinese fashion, with the entire page cut from a single wood printing block. The mission presses also pioneered in the use of printing types cut in the form of cursive Chinese characters and attractive, cursive *hiragana;* other traditional printing had always used only the square, book-hands for both.

In the Japanese orthography version of the *Doctrina* preface it is also interesting to see that *Iesu Christo* in the first line and *Deus* in the ninth and thirteenth lines have been written in Latin monograms as and , which fit in well with the cursive ductus of the page and look as a result almost like cursive Chinese characters. The 1600 character version is not an exact transcript of the 1592 romanized text, but incorporates a large number of minor changes and corrections in the text.

Printed book, collection of the Biblioteca Casanatense, Rome.



DOCTRINA
no jo.

VOn aruji IESV.Chriſto go zaixe no aida, midexi tachini voxiye voqui tamŏ coto no vchi ni, tori uaqi voxiye tamŏ coto ua, nandachi ni voxiyeqeru gotoqu, ſſai ninguen ni goxŏ uo taſucaru michi no macoto no voqite uo firomeyo to no von coto nari. Core ſunauachi gacuxa tachi no nocamŏ gotoqu, mitçu no coto ni qiuamaru nari. Fitotçu ni ua, xinji tatematçuru beqi coto: futatçuni ua, tanomoxiqu zonji tatematçuru beqi coto : mitçuni ua, mimochi vo motte tçutomu beqi coto core nari. Xinji tatematçuru beqi coto toua, Fides no jen ni ataru coto nari : core ninguen no funbet ni voyebanu coto nari. Corera no coto uo vaqimayezumba, goxŏ no michini mayô coto vouocaru bexi. Tanomoxiqu vomô coto toua, Sperança no jen ni ataru coto nari: core ſunachi Chriſtan ni Deus yori ataye tamŏbexi tono von yacuſocu no coto nari. Corera no gui uo xirazumba, nangui ni vŏ beqi toqi, tanomu tocoro naxi to vomoite, cocoro uo vxinŏ cotomo arubexi : core mata anima no vôqinaru ſiuari nari.

A 2 Mi

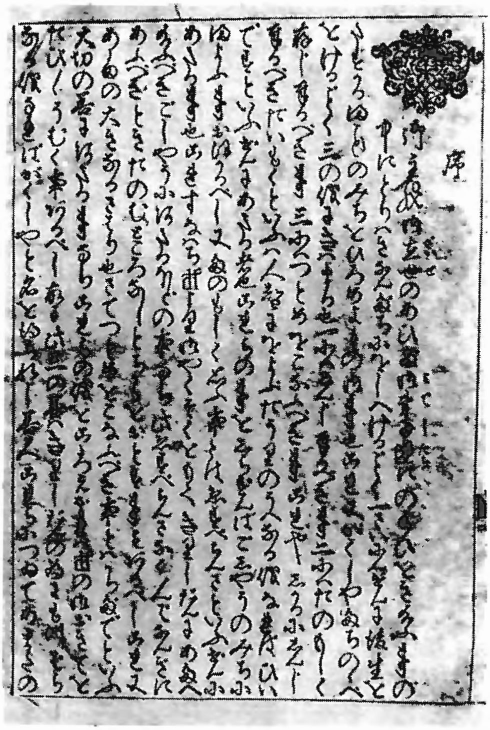


PLATE 24
The "Preface" (*jo*)
to the 1600 Japanese script
Doctrina Christan.

PLATE 23
The "Preface" (*jo*)
to the 1592 romanized
Doctrina Christan.

PLATE 25

The *Racuyoxu*, a mission press lexical compilation.

Middle Japanese; printed book, Nagasaki, 1598.

The *Racuyoxu*, modern *Rakuyōshū*, was a remarkable advance in Japanese lexicography growing out of the European missionaries' need for comprehensive dictionaries of the language and guides to its complex orthography, arranged in somewhat more rational fashion than the traditional tools which they found available for their use (see text, p. 196).

The double page illustrated is from Part III of the *Racuyoxu*, in which cursive Chinese characters are arranged according to their Sino-Japanese pronunciation, and a selection of the compounds in which each is used is given. The Sino-Japanese pronunciations of the compounds are indicated in *hiragana* to the right of the characters, while the Japanese *kun* "reading," i.e., the meaning of the Chinese character in Japanese, is given for each in *hiragana* to the left of the characters. The double page illustrated begins (in the second column on the right) with words pronounced *se* (Middle Japanese [še], which would have been written *xe* in the mission orthography); the first entries are Sino-Japanese *se* "age, generation," glossed with Japanese *yo*, followed by the compound *sekai* "world," with the character *kai* glossed with Japanese *sakai* "limits."

The movable-type printing of this section of the *Racuyoxu* shows most of the technological innovations which the mission presses brought to Japanese orthography and printing, notably the use of cursive printing types for Chinese characters.

Printed book (incomplete), Uchino Collection, Japan.

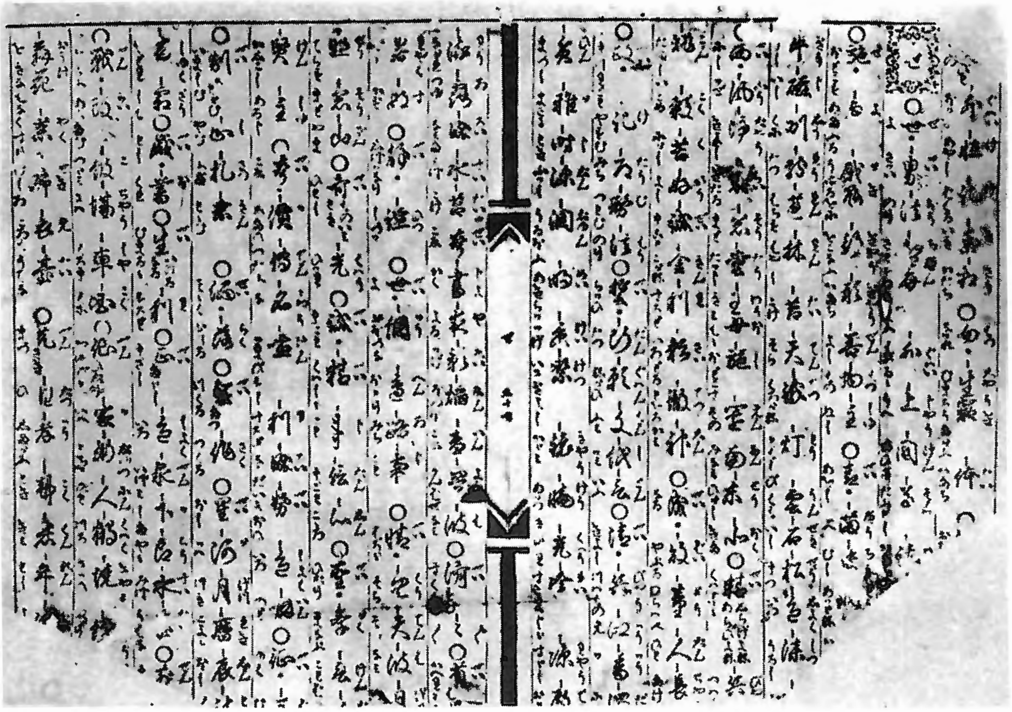


PLATE 25

The *Racuyoxu*, a mission press lexical compilation.